

Subj: Coin Scale Alert.....
Date: 02/11/2002 2:42:24 PM Central Standard Time
From: seashore17@yahoo.com (Donald Gorlick)
To: ericnumis@aol.com (Eric Newman)

My Dear Friend,

If you go to Ebay and log onto #1331810621, its a coin scale 1 dollar thru 20 dol. Its built like a Seymour, or a Moores Patent except the coin receptacles lift it is really a delicious scale it is priced at the moment at 455.00 and the fellow bidding is a coin dealer who usually bids very high and gets the item...I would imagine this is in the 800.00 range and it might even be over a 1000.00, but I really think that it is worth about 1300.00.....any way my mentor, look at it and see what you might want to do, unless of course you all ready have this as an example. Don Gorlick

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<http://greetings.yahoo.com>

----- Headers -----

Return-Path: <seashore17@yahoo.com>

Received: from rly-zd04.mx.aol.com (rly-zd04.mail.aol.com [172.31.33.228]) by air-zd05.mail.aol.com (v83.35) with ESMTP id MAILINZD55-0211154224; Mon, 11 Feb 2002 15:42:24 -0500

Received: from web14205.mail.yahoo.com (web14205.mail.yahoo.com [216.136.172.151]) by rly-zd04.mx.aol.com (v83.35) with ESMTP id MAILRELAYINZD42-0211154204; Mon, 11 Feb 2002 15:42:04 1900

Message-ID: <20020211204201.36680.qmail@web14205.mail.yahoo.com>

Received: from [198.104.0.100] by web14205.mail.yahoo.com via HTTP; Mon, 11 Feb 2002 12:42:01 PST

Date: Mon, 11 Feb 2002 12:42:01 -0800 (PST)

From: Donald Gorlick <seashore17@yahoo.com>

Subject: Coin Scale Alert....

To: Eric Newman <ericnumis@aol.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

April 29, 2002

Ms. Ruth Willard
Box 27565
San Francisco, CA 94127

Dear Ruth:

I enclose a draft of my article on the new American CCD. It includes ten photocopies covering the illustrations to accompany it. Primarily, please read the article and make suggestions to improve it. I am submitting it to others for suggestions also. Corrections will not hurt my feelings, but please let me review them.


As we discussed, I plan to have this article published in **The Numismatist** and in **Equilibrium**, so I want to know when the **Equilibrium** might schedule it. I will then arrange for the nearest month for **The Numismatist** publication.

I will send you the final draft of the article on disc and a hard copy, if that is the best way. I will send either glossy imagery on disc or glossy prints with the text for illustrations attached. I would like one illustration (the Allender) in vertical position, the others to be horizontal. I would like the horizontal illustrations to be about 6 inches wide. Please tell me how to make it as easy for you as necessary.

I look forward to your prompt reply.

Thrive.

Sincerely,



Eric P. Newman

EPN:bv

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

April 29, 2002

Mr. Don Gorlick
P.O. Box 24541
Seattle, WA 96124-0541

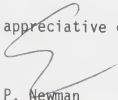
Dear Don:

Here is the article on your find. Also some photocopies of illustrations to be used. I want you to make any suggestions you wish to improve the matter. You cannot hurt my feelings by any suggested changes.

It will be published, I hope, in both the **Equilibrium** and **The Numismatist** at about the same time.

I enjoyed the research on the George Howard CCD immensely and thank you for that fun also.

Your appreciative collector friend,



Eric P. Newman

EPN:bv

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

April 29, 2002

Ms. Barbara Gregory
American Numismatic Assn.
818 Cascade Ave.
Colorado Springs, CO 80903-3279

Dear Barbara:

Here is the hard text of the article on the new detector I discussed with you. Please make any and all suggestions to improve it. I also enclose photocopies of illustrations with labels. No suggestion will hurt my feelings. I also am submitting it to others for suggestions.

If it qualifies, I want it published about the same time as in **Equilibrium**, the scale collectors' publication, not before. I am obtaining their schedule.

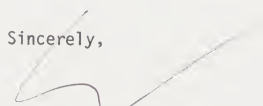
I will send you a hard copy of the final text and a disc or tape of it. I can send you glossy prints of the illustrations or on disc or both, whatever is most practical. The Allender illustration should be in vertical position and the others horizontal. The illustrations need to be large as it will help comprehension for some readers. It is really fun to find an unknown numismatic item and I wish it were simpler to explain. It is the gadget of gadgets for me.

I look forward to your input or that of anyone to whom you may submit it.

I will also have another item for you shortly.

Thrive,

Sincerely,



Eric P. Newman

EPN:bv



**American Numismatic
ASSOCIATION**

818 North Cascade Avenue
Colorado Springs, CO 80903-3279
Telephone 719/632-2646
Fax 719/634-4085 • www.money.org

May 9, 2002

Eric P. Newman
6450 Cecil Avenue
St. Louis, MO 63105

Dear Eric:

Enclosed are my suggestions for improvements in your article regarding the newly discovered counterfeit coin detector. I hope you can decipher my notes. (I usually don't edit on text printouts, preferring instead to work on the computer, which is much more forgiving!)

The topic is complicated and potentially confusing. My changes are intended to aid reader comprehension by simplifying sentences, smoothing transitions and clarifying the CCDs under discussion. These are "first round" edits only; additional, minor changes likely would be suggested on subsequent reviews.

I hope this is helpful and that the red ink is not too daunting.

Kindest regards,

Barbara Gregory
Editor/Publisher
THE NUMISMATIST

AN UNKNOWN 1849 AMERICAN GOLD COIN MECHANICAL COUNTERFEIT DETECTOR APPEARS

By

Eric P. Newman

To know that an unusual type of American gold coin mechanical counterfeit ^{designed} detector was designed and produced at the end of 1849 ^{has been discovered. What makes the find unusual is} and that no example has heretofore been located or clearly described ^{is surprising}. The recent appearance of such a counterfeit coin detector (usually referred to herein as a CCD) is exciting and ties into ^{(CCD) not unlike learning (plans) new H.} American numismatic, metrological and Gold Rush history. (The find is similar to the discovery that an "extinct" species of animal is very much alive.) The CCD is distinctive ^{newly discovered} in that it incorporates ^{by being a balance with a swinging arm to accommodate the smaller denominations of} U.S. gold coin, while the balance beam to which that arm is attached accommodates the larger denominations. To understand the unique nature of this device, we must first look at its predecessors.

Prior to the major discoveries of gold in California in 1848, ^{there were} only three denominations of U.S. gold coinage: ^{the \$2.50 (quarter eagle, the \$5 (half eagle, and the \$10 (eagle). When large quantities of California gold became available for coinage, the United States Congress authorized the U.S. Mint to add the \$1 and \$20 denominations pursuant to the Act of March 3, 1849. Although there had been and were major}

counterfeit and tampering problems with the many foreign gold coins in circulation in the United States, ^{the modest amount of gold coins minted in the United States and remaining}

At the time, many foreign gold coins also circulated in the United States, and counterfeiting and tampering posed a major problem.

(or "American")

Note: Redundant
to use both
dollar amount
and coin name

color
were struck

spout

in circulation was not substantially targeted. ^{But when} When in 1849 it was realized that ^{in 1849 and} production of U.S. gold coinage would greatly increase, and that foreign gold coins in American circulation ^{was} would be phased out as soon as possible ^{was} it seemed that more protection for the public ^{was} would be needed against counterfeit and underweight U.S. gold coinage.

^{insert from pg. 1} * [→] Equal-arm balances ^{were used} had been practical during the American colonial period and ^{well into the} continuing for more than the first half of the 19th century in the United States to test the weight of foreign coin ³ and to ³ compare ^{were compared} the results to charts and tables specifying proper

coin weights. The only other protections against counterfeits were observation and ^{a simple "ring" test} (That's, a piece was tapped on its edge - a resounding ring signified a genuine product, while vibration sounds (a ringing test). ^{a dull sound indicated a counterfeit} Sophistication in casting, alloying and plating had been ^{became more sophisticated, and} developing rapidly so that improved accuracy in testing became necessary. A slightly

^{counterfeit composed of alternate metals could be increased in size (either diameter or thickness)} enlarged diameter or thickness of a counterfeit gold coin made of other metals could ^{to yield} create a proper weight, thus often ^{new paragraph} deceiving the tester. Mechanics primarily in England in the early 19th century had developed a balance ^{beam usually} containing two adjacent gold coin holders cut into the beam on one side of its fulcrum and a counterweight ^{as part} of the beam on the other side so that by placing gold coin holders at a proper distance from the fulcrum the moment created by the gold coin being tested would be the same for each denomination and the beam would balance on the fulcrum if the coin was of proper weight.

^{of} Horizontal circular coin holders ^{were countersunk into the brass beam with the} exact circumference of a genuine coin. ^{were countersunk into the brass beam.} A slot ^{of the exact thickness of the} of the genuine coin was cut ^{was cut away from} through a diameter of each coin holder so that thickness could be checked. This was called a slot gauge. A chord or arc, ^{so that} across part of the circumference of each coin holder ^{so that} was cut away on opposite sides of the beam to enable any coin to be easily lifted ^{could} TR

out of its holder ^{from the} with one's fingers. The fulcrum on which the beam rested was mounted on a brass base, and the device was called a rocker because of its seesaw movement on its fulcrum. ^{"quotes"} ^{the} ^{what device? the beam?}

The first American CCD copied all such English principles and was produced in 1834 by T. Moore of Philadelphia to test the U.S. \$2.50 ~~quarter eagle~~ ^{new} and the \$5 half-eagle of the then ^{new} size and weight (Newman-Mallis, III-2-4).² This device ^{did not} contained ^{a holder for} no \$10 eagle holder because no \$10 U.S. gold coins ^{had been} had been struck since 1804 and all ^{other gold coins} other gold coins U.S. gold coins from earlier years were withdrawn from normal circulation by banks and the public ^{because} due to their intrinsic value ^{was} having become higher than ^{their} face value. The Moore CCD was made with and without the name of the maker on the counterweight and sometimes with the word PATENT ^{appeared} on the base even though no patent was ever issued for ^{it measured} it. Its length ^{in length and} was about 3.90 inches and its height ^{in height,} about 0.80 inches so that it would ^{it} readily fit into one's pocket or pouch.

^{however,} In the United States by 1849 the size of any CCD for the five denominations of gold coinage (\$20, \$10, \$5, \$2.50, and \$1), which were or were soon to be in circulation (the \$10 denomination had been resumed in 1838 and the \$3 denomination was not authorized until February 21, 1853) ^{created a problem.} The fact that the \$20 double eagle ^{was} twenty times the weight of the \$1 gold piece would require a balance beam ^{in length} length of about 15 inches in order to use a rocker device similar to Moore's or an English type ^{because} because the distance of the center point of the \$1 coin holder had to be ²⁰ twenty times farther from the fulcrum than the center point of the \$20 coin holder in order to provide the same moment for balancing when the appropriate coin was being tested (Obviously, ^{to reduce} to reduce ^{beam length,} beam length, ^{parentheses} parentheses

the position of the \$20 coin holder would be as close to the fulcrum as practical) to reduce beam length. To make a pocket-size CCD of the ^{new} ~~prior~~ ^{with} ~~previous~~ ^{positioned} types seemed unworkable.

To place the coin holders on both sides of the fulcrum would require an adjustable counterweight or adding a movable weight. The English ^{placing} ~~beginning~~ ^{employed} in the 18th century, ^{individually} ~~weighing~~ ^{They attached} two or three gold denominations ^{parents} on a horizontal hinge on the top of the counterweight side of the fulcrum enabling the moment for balancing to be changed manually by turning over the swinging arm(s) 180 degrees on a hinge pin(s). (This arm(s) ^{TR} ~~was~~ ^{commonly} called a turnover or a "turn.")

Several mechanical designers in America ^{6 to} ~~during~~ ^{period of} the 1849-1850 period ^{attempted} undertook to solve the American gold coin testing problem. A rocker for only the \$20 coin was produced (Newman-Mallis, III-2-12) ^{and} K. & G Howard of Philadelphia made a rocker ^{Flanagan} only for the \$5, \$2.50, and \$1 denominations (Newman-Mallis, III-2-17 and C 9). John Allender of New London, Connecticut placed the three smaller ^A ~~denomination~~ coin cavities on the beam on one side of the fulcrum and the two larger ^A ~~denomination~~ coin cavities on the beam on the other side of the fulcrum, but added a separate counterweight to fit into the \$1 coin holder when the larger denomination coins were being tested (Newman-Mallis, II-2-9, etc.). Allender's device was about 8.50 inches long, being somewhat larger than the desired pocket size. However, he commented in his March 26, 1850 patent application:

"I am aware that balances for proving coin have been made with two levers hung upon one fulcrum so arranged as to weigh all the coins upon one side of said fulcrum, and when the larger coins were weighed the lever in which the small ones are weighed is turned to the opposite side of the fulcrum. Therefore I make no claim to instruments constructed with more than one lever and to weigh upon one side of the fulcrum only."

There are some technical ^{wording} ambiguities in this description:

- (a) Two levers could not be on one fulcrum unless they were side by side ^(not *parallel*) affecting each other ^{or unless hand held like a Byzantine cruciform CCD.}
- (b) The arm ^{that} which was turned over cannot be classified as a lever because in its manual movement no leverage occurred.

^{Allender} ^{the} What was meant was that their "lever" was a swinging arm or turn attached by a hinge to the main beam at or near the ^{location of the fulcrum}. The language indicates that only a single "lever" was turned to the "opposite side" ^{TK}, not two.

^{TK} Allender's description of the earlier device was repeated in the patent issued to him on November 27, 1855 (Newman-Mallis, II-2-9A and IV-1-26). This description clearly referred to the ^{counterfeit coin detector} George Howard CCD which has recently appeared.

The George Howard CCD is so named ^{is thought to be the manufacturer} herein for the following reasons even though its maker's identification ^{the device is marked with} is only a capital H punched on the top of its one swinging arm:

^{which one?}
The CCD mentioned by Allender...

- (a) ^{which one?} The CCD previously mentioned is punched with K & G HOWARD PHIL is very similar ^{to what?} in shape and workmanship ^{to the recently discovered CCD.}

- (b) G HOWARD ^{TK} is apparently GEORGE HOWARD, whose name in ^{later appeared in} Philadelphia directories soon became GEORGE C. HOWARD. There is ^{as} no "K. Howard" ^{is listed} in those directories but he may have been a father or ^{the another} other relative of George Howard.

- (c) ^{TK} George Howard (George C. Howard) is listed in the Philadelphia directories in 1845 as a machinist at Broad and Paper streets. His occupation changed to mechanical engineer as his business grew, and he soon occupied three lots on

South 18th Street below Market Street. He advertised in 1862 as a maker of tools for machinists, factories, railroad repair yards, etc. His listings cease in

1880

The recently discovered detector (which I will call the The George Howard CCD) is distinctive because the swinging arm containing two of the smaller-size coin holders transfers weight from one side of the fulcrum to the other. *The* Prior swinging arm turnovers or turns on rockers *as coin rollers* changed the moment for balancing only on one side of the fulcrum and did not contain *at no* any coin holders. When the swinging arm of the George Howard CCD has its smaller size coin holders facing upward it covers some of the coin holders on the balance beam *below* underneath *if* so that they cannot then be used in *that* position for testing. When that arm is swung over on its hinge across the fulcrum it adds its weight to the counterweight side of the beam, changing the moment on that side so that the larger coin holders on the other side can be used. *new paragraph #* Therefore the weight of the swinging arm must be arranged with precision because it performs a function on each side of the fulcrum. It is reasonably easy to adjust the moment of a balance beam itself by reducing the side *that* which is too heavy by filing or polishing some part of it but in the case of a swinging arm which is too light *that* it is *the pin-date becomes* complicated. If one adjusts the counterweight side of the beam on which the arm sometimes rests *this may require* a further adjustment of the beam on the larger coin holder side. *may be required* The weight of metal used for casting parts could not be relied upon because the countersinking of coin holders *and* the cutting of slot gauges and chords *or are cuts* to allow easy extraction of coins from holders required substantial *subsequent* machining. *new paragraph #* Thus obtaining weight perfection for the arm was delicate and required extensive and careful handwork, increasing cost. The George Howard CCD in order to reduce the

The George Howard CCD
 beam length crowded the \$20 coin holder close to the fulcrum, causing the \$10 coin holder to overlap the \$20 coin holder and also causing the slot gauges to be cut on the *a* diagonal instead of being in line with the center of the beam.

Semi-robots Frederick Meyers (^{or} Meyer, ^{or} Myer, ^{or} Myers) apparently undertook to improve the George Howard CCD by making the beam shorter, by eliminating the overlap of the \$10 coin holder over the \$20 coin holder, and by changing the position of the diagonal slot gauges (Newman-Mallis, III-2-13, etc.). This was done by adding a second swinging arm on the same hinge pin which held the first swinging arm. This additional arm contained holders for the \$2.50 and \$1 coins. The first swinging arm was revised to hold *accommodate* only the \$5 coin holder and the beam itself held only the \$20 and \$10 coin holders. This enabled the position of the \$20 coin holder to be distanced from the fulcrum enough to eliminate the \$10 overlap. *of the \$10 coin holder* Because the Meyers' CCD had transferred the position of the \$5 coin holder from the beam to a second swinging arm, the length of the Meyers' CCD *his device* was shorter than the George Howard device by about one inch. A more desirable CCD *counterfeit coin detector* *was the result,* had resulted but with even more production adjustments and *can* more labor than the George *it required* Howard CCD.

or - "In the meantime,"
 In the meanwhile, the Allender stressed low cost for his CCD. He could have added a simple turnover or turn without coin holders to his CCD to take the place of his *of* separate weight he used *because* there was adequate open space to do so on the smaller coin side of the beam between the \$2.50 and \$1 coin holders. *Chose not to pursue this option* But he did not do so. He *he* *was* obviously concerned about cost and in his patent application filed March 26, 1850 he stated:

"This apparatus can be made and sold cheaper than any other that will perform the same service with the same facility."

This cost factor is independently confirmed by a letter from the ^{United States} U.S. Mint to the U.S. Patent Office dated January 10, 1855 (Newman-Mallis, IV-1-17) in which it is stated with respect to the price paid by the Mint for an Allender CCD: "The cost was trifling."

It is clear that the production costs of the George Howard CCD and the Meyers CCD were far in excess of the cost of the Allender CCD. Allender continually sold quantities of his device. For 1854, ^{issues,} he added a second size to the \$1 coin holder in a concentric position, ^{and} a bushing for the \$3 gold piece ^{that} which fit into the \$5 coin holder ^{and} followed by a side positioned \$3 coin holder. ^{This was identification} He also changed the punched in lettered ^{text} on the beam from time to time. ^{later} His products are now in many collections. ^{today} The newly appearing ^{need} George Howard CCD and the Meyers CCD are each the only examples known. ^{of each device} This indicates that the public chose the Allender CCDs because of their price, even though they were too long to be ^{PR} easily carried in one's pocket and the separate Allender weight was ^{often} easily mislaid or lost. The unique existence of the George Howard and the Meyers CCDs also indicates that very few of either could have been made or sold. ^{As I said} The situation is similar to the well-known medical comment. "The operation was a major success but the patient died." ^{TR}

The illustrations accompanying this article will hopefully clarify the detail attempted to be described.

When a writer states that something is unknown or unique ^{Not!} to his knowledge it must be understood that ^{descriptive captions will be helpful} this can turn out to be an error and that another or other ^{one or more} examples may be ^{exist} in existence or known by others. ^{are} If so the writer will gladly accept such ^{then fully} corrections with thanks ^{Should this be the case with my assertions (or theory), I} for being as informed. Nevertheless on a "scale" of 1 to 10 the

George Howard ~~CCD~~^T and the Meyers ~~CCD~~^T *counterfeit coin detectors* seem to be a 12 because they are so amazingly distinctive. No other swinging arms containing coin holders are found in any *devices* ~~CCDs~~ anywhere.

Sincere appreciation is expressed to my friend Donald Gorlick for bringing the George Howard CCD to my attention and recognizing its significance; to my son Andrew E. Newman for making it available for my study and to James Rhodes, Thomas Serfass and Mark Rabinowitz for digital photography and preparation assistance *in preparing this article.*

Explanatory Notes

¹ Because the word "moment" has various meanings the use of the word *moment* herein means "a tendency to produce motion about an axis" such as a fulcrum and that the mathematical formula for a *moment* is the product of the mass (or weight) multiplied by the distance of the center of gravity of the mass from the fulcrum.

² Eric P. Newman and A. George Maltis, U.S. Coin Scales and Mechanical Counterfeit Coin Detectors (St. Louis, 1939). The page numbers are in parentheses in the text.

³ For English antecedents see Michael A. Crawford, Sovereign Balances. (England, 1983)

Subj: Re: The remarkable CCD Date: 05/13/2002 11:08:03 PM Central Daylight Time From: seashore17@yahoo.com (Donald Gorlick) To: EricNumis@aol.com

Hello my dear friend,

My apology for not responding to your gracious information regarding the wonderful acquisition to the collection...The information accompanying the pictures were in keeping with the impeccable work you do on compiling information and data. I can't imagine anytign that could be added that would contribute, except my envy and probably the envy of all the collectors.

Your research goes so far beyond what most people could or would endeavor, its remarkable...my hat is off as always to you..

Publish, and relish, and enjoy...as it is said in the language of our tribe.... Du biss takeh a Mench... (you are indeed a maven).....Don Gorlick...

If anyone says that you have missed anything they are fully off the mark....

--- EricNumis@aol.com wrote:

- > Dear Don: About ten days ago I sent three people a
- > draft of my article about
- > the CCD you located for me. One gave me suggestions
- > for improvement, one said
- > she did not receive it, and the other was you. Did
- > you get a copy? I obtained
- > marvelous digital pictures and plan to revise it for
- > publication soon. Would
- > you be nice enough to tell me if you received it and
- > have any comments? I
- > hate to bother you on this as you may be away as you
- > said you were going to
- > visit family. My best. Eric
- >

Do You Yahoo!?

LAUNCH - Your Yahoo! Music Experience
<http://launch.yahoo.com>

Subj: Article on new CCD
Date: 05/13/2002 12:55:44 PM Central Daylight Time
From: EricNumis
To: RHWillard

Dear Ruth: I presume that about one week ago you received my article on the above subject and want to bring you further up to date. The digital pictures turned out wonderfully and I have glossy prints the size they should be published. I will attach captions to them and will send them. The text of the article has been edited by the editor of The Numismatist and the suggested changes are extremely helpful. I will rewrite the text as soon as I hear from you as to any suggestions you may have. I will send the tape and a hard copy. I also need to know when you may plan to publish the item so I can coordinate with the Numismatist as to the publishing date. I hope you continue to enjoy your editing of EQUILIBRIUM. My best wishes, ERIC

Subj:	Re: The missing article
Date:	05/14/2002 12:36:22 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Please understand that I can recommend a schedule to Diana but that she is sometimes intractable about it. Can you postpone scheduling it with the Numismatist until I have a chance to see how the wind blows?

Best regards, Ruth

Subj:	Your article
Date:	05/24/2002 12:24:37 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Your fine article arrived late Monday, and I agree this is an astounding discovery. It's very exciting to have a part in such an announcement. You did not tell me whether the copy you sent me incorporates the suggestions made by the Numismatic Society. Does it?

I think that the article will be more easily understood by a large segment of our membership if we use much of the descriptive material as captions with the various photographs. Do you want to do the captions, or do you want me to do them subject to your approval?

Is there some reason why you did not send it as an email attachment? That way I could keep an original and make a work copy to edit for your approval. If you send me just a hard copy, then I need to re-type the entire article.

Tom Dooley, Norm Cima, and I have spent much of the past two days working on the presentation we are planning for Diana. I think we have it under control now.

Best regards, Ruth

Subj:	Re: Your article
Date:	05/24/2002 7:01:02 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Dear Ruth: I am so glad that you finally received my CCD article and that you like it. I have received from the editor of The Numismatist a number of suggestions for clarity and effectiveness and naturally have added some of my own. An attachment will be sent later so you will not have to recopy it. The illustrations are now the right size and captions will be further refined. I will be rewriting the text next week. You will first receive a hard copy for any input you care to offer. I need your clearance before I can tell the Numismatist what month it may publish and you told me you might want to clear with Diana first. Please do that as soon as you can. It is wonderful that you are doing a recognition for Diana as she has been outstanding just as Michael was. My best to you. Eric

Subj:	Re: Your article
Date:	05/24/2002 8:02:57 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

I do have some suggestions for clarity, and will try very hard to get them to you before I leave next Wednesday for Pittsburgh.

I'm running behind on the paperwork I must complete in connection with settling Wills' s estate and getting some long-delayed house repairs done while at the same time adjusting to Diana's (unavoidably) unpredictable performance.

If nothing else, I will take your article with me on the plane and mail you my handwritten thoughts when I get to Pittsburgh.

Ruth

Subj:	Re: Your article
Date:	05/27/2002 10:11:23 AM Central Daylight Time
From:	EricNumis
To:	RHWillard

Ruth: I will be delighted to receive your suggestions as to improving my article and will not rewrite it until I experience your high altitude editing . Please do not wear yourself out before the Convention as you need all of your energy to enjoy it. Have a wonderful time. Eric

Subj:	Re: Your article
Date:	05/27/2002 10:56:41 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Thanks so much for your understanding. Actually, I have given it quite a bit of thought, and would like to share these ideas for you to think about.

Is it your preference to write precisely the same article for the Numismatics Society and our scale collectors' society? Or would you be comfortable with changing the format somewhat for our heterogeneous membership? Numismatists are interested primarily in the relationship of this exciting new discovery to the collecting and study of coins. Most of our members are interested in how it relates to the collecting of scales. For example, you have not told where or how the scale came to light. This is the kind of adventure story our members love, and can identify with. You need not name names or sources. (Actually, numismatists too might enjoy learning how this mysterious scale suddenly surfaced 150 years after it was produced)

At present the article is hard to follow. Go ahead with positioning your illustrations and writing (possibly tentative) captions for them. Once that is done, it will be easier to edit the remaining text for clarity.

The following suggestions will be useful to the extent that they do not interfere with your use of parts of the text in the picture captions.

With respect to organization, all the information about American gold coins should be together. I suggest deleting the second paragraph from page 1 and combining that information with the second paragraph on the present page 3.

With respect to style, present-day readers are accustomed less flowery sentence structure. By using active rather than passive verbs you can convey the same information much more concisely. Break most of the long sentences into several shorter ones. The introductory sentence should grab the reader's attention and make him want to read the article.

Your introductory sentence has 31 words between the subject "To know" and the verb "is surprising." Most of those 31 words belong in a second sentence. You might begin by saying something like "This is the story of one of the biggest thrills a collector or scholar can experience: finding a 150 (152?) year old artifact that differs significantly from others of its class, but has never before been located or clearly described. The find is similar to discovering that an "extinct" species of animal is very much alive." Then tell what it is and why it is distinctive. Now you have captured your audience—even the ones who would not otherwise care about anything so exotic as a coin scale.

Also, your transitions are not really clear. I like to think of transitions as freeway ^{road} off-ramp signs. The first sign you see gives the name of the locality (or here, idea) to which you are going next. Only after you know where you are going do you begin to see signs describing the details of that place; in other words, why you want to go there. (how this information is relevant to the scale in question?)

^{work} This entire article features a truly distinctive scale. The "places/ideas" you are going to visit show why it is so distinctive. First you are describing the background: what kinds of scales were used for the coins in circulation during colonial and early republican times. Before saying "sophistication in casting...." you need an off-ramp sign telling when this happened...maybe something like, "But by _____, sophistication in casting...."

^{road 5-30} Next paragraph, "The first American CCD copied all such..." has an excellent off-ramp. The reader knows instantly that this is a new era, and the very first US CCD patented. Why not mention the patent number, preferably in an end note?

Next paragraph, pg 3, I suggest starting with "By 1849, the size of any CCD for the five denominations of US Wednesday, May 29, 2002 America Online: EricNumis"

gold coinage (list denominations) created a problem." Put the particulars (about the \$10.00 resuming in 1838 and the \$3.00 not authorized until 1853) in an end note. The next sentence is too long. I think that the "locality/idea" to which you are going is a coin scale that would need a beam 15 inches long! The following sentences explain the details.--Why would it need to be so long? Many of those details will be useful as captions.

On page 4, say you can start with the date (where you are going--a new time period) and saying "American mechanical designers" (more concise). Say something like "Several variations were produced: Then list them, but put the citations in an end note or notes rather than within the text itself (I've been trying to get Diana to do this for years!) The details about each variation can go under the photos.

In the middle of page 5, you identify your big discovery obliquely. Why not make a splash of it? Start a new. Say something to the effect that "The scale recently discovered was obviously produced during this period but to the best knowledge of the author has never before been published!"

Then tell how Allender referred to it in his March 26, 1860 patent application and again in 1856. (always put the patent numbers in your endnotes; some people will want to look them up, but others find them distracting when inserted within the text.)

Here you will have several photos and a lot of descriptive text, much of which belongs in the captions.

Next ~~off-ramp~~ ^{sign}: Frederick Meyers' improvement--fine as written

Next ~~off-ramp~~ ^{sign}: Allenders' marketing strategy--fine as written.

Pg 8--delete sentence "The illustrations....described." Self evident.

I think your ending is excellent.

Please number the endnotes in the order they to items in the text.

Eric, do not feel obligated to accept any of my recommendations that make you uncomfortable. Just keep the principles I have outlined in mind. It is your article, and you are free to write the it as you wish.

I eagerly await your revision! rRuth

Subj:	(no subject)
Date:	05/28/2002 10:02:44 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Please understand that yesterday's letter was a hurried attempt, and not all of the ideas I put forth may be workable. Just remember the principle--(as they told us in college--"tell 'em what you're gonna tell 'em; tell 'em; tell 'em what you told 'em").

In my hurry, I even misnamed my catch word--I meant to say Road Signs, not Off Ramps.

Regarding titles, Diana insists upon not more than four words. But she will accept an explanatory subtitle, which she puts in smaller type. I woke up this morning with a title you may find too far out--but give it some thought.

A "12" IS FOUND ! By E Newman

(Sub title--something like "Unknown CCD by famous maker hidden for 150 years")

Your closing remarks could include some speculation--How could a CCD this unusual simply fall out of sight? Did you have an opportunity to test it? Is it accurate? Fragile? Would it have been prohibitively expensive? Could it have been an experimental model, never marketed? Then, without apologizing for not knowing the answers, simply request whatever information any reader may be able to supply.

Off to the races!

Ruth

Subj:	Re: Your article
Date:	05/28/2002 3:29:46 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Dear Ruth: Your suggestions indicate an experienced editor's skill. I will use as many as I can. My other editor made some of the same ones so I am sure you are sound. I by training write for accuracy and originality and am long sentenced but you ought to see my earlier drafts if you want to see a mess. I just finished my captions for the illustrations. I do not mind having some differences between the numismatic version and the metrology version if you feel that is necessary as some of the numismatic people are full of knowledge about coin production machinery. The source of the item I deliberately omitted because I did not want to make the seller unhappy (even though he said the \$1,000 I paid him was far more than he even dreamed of but he did not realize it was a unique item) and I did not want to put the person who told me about it to get in trouble by being accused of not telling others. The seller or his agent will not tell me anything about its background, possibly for fear of an income tax problem. It is really fun to be a collector and researcher and have all these challenges. This will give you something to think about while on your way to the Convention. Thanks again for your wonderful help. Eric

Subj:	You are a 12
Date:	05/28/2002 3:59:02 PM Central Daylight Time
From:	EricNumis
To:	REWillard

Dear Ruth: If I do not want an article read then I might use a title of four words like "A 12 is found." Imagine a few years from now or even now someone will think this might refer to the adoption of the metric system or someone took fertility drugs and had 12 kids or someone had 12 toes or some child age 12 was located. Of course I could use "Unknown Coin Detector Located" but it is not a metal detector, American is important and 1849 (the California Gold Rush) is important and Counterfeit is important. Double titles are sometimes necessary but not always. Please tell Diana if she raises the subject that I made the title as short as I could. Eric

Subj:	Better title
Date:	06/06/2002 11:15:18 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Hello, Eric,

The convention was a smashing success! Pittsburgh is a fascinating city, and the arrangements made by Ben Smith and Les Firth enabled us to see some really remarkable sights while there. The convention sessions were lively and informative. Ben and Les did a superb job of involving the maximum number of members as introducers, presentors, and other participants.

As I'm sure I have told you, my computer has been very unreliable for the past three months. Before leaving I transferred all my files to a couple of zip disks, and while I was away a friend reformatted my hard drive. He has a little fine tuning to do tomorrow, but already I can see a big improvement.

While transferring my records, I came across the email you sent Diana about your article, and I think the wording you used for "subject" would make a perfect title.

"My Unknown Detector" is intriguing and better related to the article than my earlier suggestion.

I look forward to hearing from you.

Ruth

Subj:	Re: Article on Newly Discovered CCD
Date:	06/28/2002 11:34:59 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Your article did arrive, and I like it a lot. The pictures are excellent! I apologize for not responding sooner. My little dog had double cataract surgery right after I got back from Pittsburgh, and her care has been far more demanding than I expected, requiring medications every six hours day and night as well as constant supervision to keep her from rubbing or scratching her eyes while they heal. Then to add to my distractions, I managed to fall backwards as I started up the steps, striking my head on the sharp corner of a wall clock behind me. No permanent injury, but I have stitches inside and staples outside. The only time the wound is painful is when I roll over in my sleep so that it touches the pillow. That wakes me up in a hurry!

It has slowed me down a bit.

Diana sent the April EQM last week. It requires the usual technical revisions but some content revision as well, as she devoted 23 of the 28 pages to English articles even though she needed to postpone US articles in her possession for some time.

I will be happy to insert the caption amendments, but I would really like to receive a copy as an email attachment. Do you know how to attach the article to an email? I'd like to insert some possible subheads for your approval. On an article of this length, people tend to get lost without those. Working back on forth is much faster by email than by US Mail. If you don't know how to do that, I can mark up the nice typescript.

I hope you have a wonderful time in Scandinavia! Having a quarter-Norwegian ancestry, I hope to go there one day.

Regards,, Ruth

Subj:	Re: ARTICLE ON NEWLY DISCOVERED SCALE
Date:	06/29/2002 7:04:10 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

One never knows when Diana will publish anything. However, since the APRIL issue is only now at the printers, it's doubtful that we will be too late with your article for the OCTOBER issue. Regardless, please feel free to go ahead with the Numismatist. The readership is almost entirely different.

I'm sorry that Gary feels so aggrieved. He did not understand that the first two speakers were asked for Seminar presentations (1/2 hour each) and that he was asked to participate in the Show and Tell--(brief 4-5 minute appearances.)

I won't get my staples out until Wednesday. But my dog, who had double cataract surgery 10 days ago, is now allowed out of her Elizabethan collar when I am able to supervise her to prevent her scratching her healing eyes. So at least one of us is making progress.

Ruth

Ruth

Subj:	Re: Your article
Date:	07/03/2002 11:43:47 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Good! I'd really like to have your headings.

My free afternoon vanished when I had to wait 45 minutes to see my tax man about the final return on Will's Keogh. Yes, I'm destapled and only slightly the less for wear. Primarily, if I turn in my sleep, putting even the slightest pressure on that spot---OUCH!

Gary Batz wrote a letter about his treatment at the convention, and I certainly agree that he was rudely treated. As I'm sure you know, involving additional members in any ISASC activity means having inexperienced people making arrangements. The Antiques Road Show is like Show and Tell except that they have someone estimate the value of the items shown. Each item is shown and priced in about 4 minutes. Gary should not have been asked to make a presentation on even one important coin scale, let alone two, in that amount of time. And to make things worse, the first presenter (as you so aptly predicted) took far over the allotted time. But having read his letter, I am appalled at the treatment he received. (But he should not blame the two Saturday presenters for his treatment on Sunday. The fault lies in our not having coached the chairman of the Antiques Road Show to tell the participants exactly how much time they were allotted, and being sure that the item they were showing was suitable for that brief a presentation. I'm going to recommend that next year we give each participant a printed list of the procedures, and have a stop watch or alarm clock on the podium to cut them off when they exceed their time slots.

Ruth

Subj:	Your article
Date:	07/03/2002 2:35:34 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Thanks, Eric.

It just arrived. I was looking at your beautiful typescript this morning, and will try to finish this today if possible.

I appreciate your quick reponse.

Ruth

Subj:	Re: Your article
Date:	07/04/2002 2:04:33 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Ruth: I am glad to know that Batz was justified in his feeling about what happened at Pittsburgh and that apologies were made to him. If he had been unjustified there might have been an inference that there were Batz in the Belfry. The subtitles for the article will be coming soon. Eric

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

Ms. Barbara Gregory, Editor
The Numismatist
American Numismatic Association
818 N. Cascade Ave
Colorado Springs, CO 80903-5279

July 10, 2002

Dear Barb:

I enclose a hard copy of my article entitled An Unknown 1849 American Gold Coin Counterfeit Detector Appears. It is accompanied by 10 illustrations with suggested captions. An electronic copy of the text will be sent to you separately or herewith. I hope the article meets with your approval.

I have obtained clearance for the article to be published at any time you wish and it will be published in due course in the EQUILIBRIUM, the scale collector's magazine that mainly reaches a different set of readers than THE NUMISMATIST.

I have also enclosed section headings which you may wish to use, modify or abandon.

The numbers on the captions for the images are intended to show the order of insertion and probably should be abandoned when the captions are set in place.

I would like 20 to 25 copies of the magazine when the article is published. Please also return the images when they have served your purpose.

I thank you again for editing suggestions and hope I have used them well.

If you need me to do anything else I will be glad to cooperate.

Your devoted friend,



Eric P. Newman

POSSIBLE INTERNAL HEADINGS FOR NEWMAN ARTICLE

Page 2	¶ 1	FIRST DETECTOR FOR U.S. GOLD COINAGE
Page 3	¶ 1	IMPACT OF INCREASED U.S. GOLD COINAGE
Page 4	¶ 1	AN UNUSUAL DETECTOR IS INVENTED
Page 8	¶ 1	EMPHASIS ON LOW COST

Subj:	Did I misunderstand?
Date:	07/11/2002 9:04:06 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Hello, Eric,

I thought you planned to send me your own subheadings before leaving on the 15th. Was I mistaken?

I'll try to call you tomorrow. Got into a bind today because my alterna.tif software (necessary for Downloading patents) would not work with my new Windows Me. fortunately Norm was available to walk me through the procedures necessary to rre-install it to the correct specifications. But by the time we finished, it was too late for me to phone anyone on the east coast.

Last night the scab came off my head wound. so I can now have a shampoo. And Cindy is now down to twice-daily medications, so I can sleep throught the night. Things are looking up.

Cheers!

Ruth

Subj:	Re: Did I misunderstand?
Date:	07/12/2002 10:39:52 AM Central Daylight Time
From:	EricNumis
To:	RHWillard

Dear Ruth: Thanks for your message. I have revised pages 4, 8, 9 & 10 of my article and will send them today. I will also send some subheading suggestions. I can also send you a sloppy disc of the whole article. I can send the entire article as revised (and the headings) by Email or by hard copy or both. Please tell me promptly what is best for your purposes. My wife and I are looking forward to our trip to get away from the sickening news. I am glad that you and your companion are repaired. Eric

Subj:	Loosen up !
Date:	07/13/2002 1:22:27 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

I will be sending your article with pictures to Diana early next week. I do not know when Diana may decide to run it, but I did tell her that you expect it to run in the Numismatics Journal, probably in October. If I am able to get any better indication, I will let you know at once.

Here are a few ideas for customizing the article for our heterogeneous audience.

First, about your title. If you look at any EQM, you will see that titles are customarily four words long, occasionally five if the words are very short. Diana is sure to abbreviate yours, if you do not. In looking over past correspondence, I was enchanted by the "subject" heading on one of your emails to Diana--MY UNKNOWN DETECTOR. That will intrigue our readers, some of whom will have no idea what a detector is. Would you be comfortable with that?

Then, your opening and closing paragraphs need to be personalized. Our rank and file members do not read academic publications. But they will respond to an adventure story, which this certainly is.

Your first sentence or two, and also your closing paragraph, should reflect your excitement. Go back to your original version, and incorporate some of those phrases.

You might open by saying something like "Finding the subject of this article--a previously unknown American mechanical gold coin counterfeit detector designed and made at the end of 1849--was like learning that an "extinct" species of animal is very much alive. Only a hint of its possible existence had been available, but that had been unrecognized. This newly located and acquired detector is distinctive ---etc etc.

Your closing paragraph also begins too formally. Would you be comfortable with something like this?

"But is it really unknown or unique? Has any other collector seen or acquired a similar or identical one? If so, I will be very grateful to learn about it. Nevertheless, on a scale of 1 to 10, etc etc."

I will put your "Appreciation" paragraph into smaller type, to distinguish it from the text.

Don't feel obligated to use my words--just try to be more conversational than professorial in the opening and closing paragraphs

Thanks for your patience!

Ruth

Subj:	Loosen up !
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To:	EricNumis

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I will put your "Appreciation" paragraph into smaller type, to distinguish it from the text.

Don't feel obligated to use my words--just try to be more conversational than professorial in the opening and closing paragraphs.

Thanks for your patience!

Ruth

Subj:	Another thought:
Date:	07/13/2002 1:28:02 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

It might be more effective to begin the final paragraph with "On a scale of 1 to 10. . ." (Omit the Nevertheless), and then close it with "But is it really unknown or unique...etc etc.

Ruth

Subj:	Re: Loosen up !
Date:	07/13/2002 1:51:19 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Ruth: A quick response to paragraph one of your Email today is that The Numismatist now indicates that that they may run the article early next year because of other matters so do not indicate any date of publication to Diana. Just tell her that it will lose some of its impact if it is delayed as it was discovered in early 2002. As to the title you suggest I do not like to use the word "My." How about "Discovering an Unknown Detector." That is only 4 words and seems to have the impact you desire. All other items are being worked on.

Eric

Subj:	Re: Loosen up !
Date:	07/13/2002 2:59:40 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Everything you suggest sounds fine to me.

Ruth

Subj:	(no subject)
Date:	07/13/2002 4:02:56 PM Central Daylight Time
From:	EPNNES
To:	RHWillard

Ruth the patient patient: Here are my revisions based upon your suggestions. The 4 word title I now feel would be better for ISASC readers is:

UNKNOWN COIN BALANCE DISCOVERED I would much prefer a 5 word title UNKNOWN AMERICAN COIN BALANCE DISCOVERED. The reason for this thinking is that the word "detector" might be construed as a metal detector or not understood at all. For ISASC people the word balance is better and to define it further I added the word Coin. I also wanted to add American so the American readers would be particularly attracted. Perhaps Diana might like the latter as it gives her an American article to show that her scope of topics is wider spread. Here is my revision of the first paragraph:

Finding a previously unknown American gold coin counterfeit detector created in 1849 was like learning that an "extinct" species of animal is very much alive. The newly located weighing device is distinctive in that it incorporates one swinging arm to accommodate some denominations of U.S. gold coins while the balance beam to which that arm is attached holds the others. Only a hint of the possible existence of such a detector has been available but that has been unrecognized. To understand the unique status of this device we first look at its predecessors.

The second to last paragraph on page 8 has been rewritten as follows:

But is the George Howard CCD really unknown or unique? Has anyone previously known of one? If so I would be grateful to learn about it. On a scale of 1 to 10 the George Howard CCD seems to be a 12 because it is so amazingly clever and distinctive. Other than the Meyers CCD which attempted to improve the Howard CCD no other swinging arm containing coin holders has been found attached to a balance beam on any CCD elsewhere. The newly found George Howard CCD can now take a distinguished place in metrological, numismatic and American Gold Rush history. I am exhausted but happier. Thanks for your help. Eric

Subj:	Re: (no subject)
Date:	07/13/2002 4:09:53 PM Central Daylight Time
From:	RHWWillard
To:	EPNNES

ERic,

I too am a little tired, but elated. Your input is superb. Now I am waiting for the revisions you mentioned,

AND the paragraph on why Ohaus produced the Numiscale. A newspaper clipping about its introduction is dated 1970.

Many thanks! Ruth

Subj:	Silver
Date:	07/13/2002 8:11:09 PM Central Daylight Time
From:	EPNNES
To:	RHWillard

As requested here is a simple statement of why a scale for silver U.S. coins was needed in 1970:

The 90% silver content in United States half dollars, quarters and dimes ended in 1964 at a time when silver as a metal was selling at \$1.29 per Troy ounce. Silver remained at that value through 1967 when a steady rise began. It increased to over \$4.00 per ounce from 1974 through 1977 and then again rose dramatically in the 1979 to 1983 period. The silver in U.S. silver coinage dated 1964 and for decades earlier contained over 0.8 Troy ounces of silver per dollar face value and made it worthwhile to melt the coins for intrinsic silver value rather than spend them for face value. Those who had such coins or found them in circulation often sold them in great quantity to dealers for three to five times face value. Bags, containers and piggy banks were emptied onto dealers' counters. Dealers bought coin sorting machines and coin counting machines to speed the transactions, but by accident or on purpose some of the coins were coined after 1964 and lacked the silver content. The coins made after 1964 were the same size and design as the prior coinage but not the same weight. Thus, instead of inspecting the date on each piece the coins could be weighed in bulk to determine whether pieces dated after 1964 were among those offered for purchase. A simple calculation comparing face value to weight would save individual inspection time. A scale calibrated to assist in this determination solved the problem.

Please change as desired. Eric

Subj:	Re: Eric Newman's detector article
Date:	07/14/2002 11:36:50 AM Central Daylight Time
From:	RHWillard
To:	thomas_serfass@yahoo.com
CC:	EricNumis

Hello, Tom Serfass,

Thank you for the message, The article came through just fine, but unfortunately there was no list of headings.

Once I have that, I can send this article off to Merry Old England.

Many thanks for your help,

Ruth

Subj:	Re: Eric Newman's detector article
Date:	07/14/2002 2:41:00 PM Central Daylight Time
From:	RHWillard
To:	thomas_serfass@yahoo.com
CC:	EricNumis

Hello again, Tom,

They came through just fine.

Many thanks!

Ruth

Subj:	Re: (no subject)
Date:	07/14/2002 9:21:36 PM Central Daylight Time
From:	RHWillard
To:	EPNNES

Dear Eric,

You are not bothersome. Yes, I know that I must combine the three separate documents to prepare the final copy. \

RE Diana--she is not normally appreciative, but then, miracles can happen. But I derive satisfaction from doing the very best that I can, not from applause.

Have a GREAT trip!

Ruth

Subj:	Your pictures
Date:	07/26/2002 8:10:11 PM Central Daylight Time
From:	RHWillard
To:	LeHitchins , EricNumis

Dear Diana and Eric,

Yesterday I emailed you, Eric, about a problem with your pictures that might require re-photographing them. Today I had an email from Diana saying that she might be able to fix the problem.

Since I will be off on a glacier somewhere for the next two weeks, I will leave it up to you, Diana, to let Eric know whether you will be able to use the photos that we sent you earlier.

Best regards to both of you,

Ruth

Subj:	article
Date:	07/31/2002 5:04:38 AM Central Daylight Time
From:	LeHitchins
To:	EricNumis
CC:	RHWillard

Dear Eric,

I'm very happy to be editing your interesting article. It's just the sort of erudite material that we need more of. I admire your book U.S. Coin Scales and CCDs and am amazed at the huge amount of work it represents.

Overall opinion

The first, most important thing to say is that we are very flattered that you are publishing this new information in EQM. Your article is very scholarly, with excellent explanations, and we want to publish it.

Your grammar and spelling are perfect (not always the case with authors!!) and I only altered the position of two sentences, as your argument flows nicely.

I particularly like your final paragraph.

Text

Where I have added in "commonly" or "normally" that is because I know of an exception to the rule. For example, I know of turn-over poises that go well over the fulcrum and I know of several 18th century rockers. The vocabulary used should follow that used in EQM and by Crawforth in his booklet on Rockers. That is why we write of platters, poises, mass and beams, not of holders, counterweights, weight and balance beams. The new find is marked only H, and that is how it should be identified, to be scholarly. Of course, your identification of it as a George Howard must be included, as your knowledge is great and your experience must be the best in the U.S. But I think any scholar would call it an H throughout, not a Howard, just in case any alternative interpretations turn up.

I've changed the "one's" and "you" to make it less personal and more academic. I'm like you, I tend to imagine myself using these things, and want to personalise the text, but I get my wrist slapped if I do. The \$20 dollar rocker (III-2-12) is referred to in this text as being in the 1849-50 period, but in your book, you've labelled it circa 1875. So, should we include it or not? Shall I ask Bill for a clear photo or should we omit it?

I have an aversion to using the word "unique", because, every time it is used, some more examples are found. It lays us open to accusations of naivety, as any factory-made object must have been one of several made. My preference is for "only example known" or "extremely rare"!

Action

Please will you look at the bits I've altered, the bits in red. If they are acceptable to you, I will change them to black, and publish. If you're unhappy with the alterations, please will you think about why I changed your original text, and send me your choice of words. I won't publish until you feel it's the best possible text.

Photos

Ruth implied that you might be able to get fresh pictures for your article. I worked on one of the pictures she sent, removing all the white area, and the captions. (Don't worry, I kept a record of what you put in the caption). I heightened the contrast, and made the CCD horizontal. I cleaned off the shadows. Then I made it 300 dpi, and had a good look at the results. Because you sent so much background that had to be removed, the resulting object is both small and fuzzy. I don't know what you and Ruth did, but I suspect that we could get much better results between you and me.

If you look at your book, III-2-8, and at III-2-12 you'll see that the rockers in those pictures are much easier to understand than, say, III-2-11. The oblique angle is how we really see rockers, and people know how to interpret those pictures much better than exact side views or exact top views. Could you get your photographer to take them at that oblique angle, please?

Then, could they be higher resolution than 150 dpi? I can manage with 150 dpi, but 300 is much better. If your photographer can take them close up, with very little background, I would be much happier. I don't mind whether they are black and white or colour. Either works. Please can you send one JPG attachment per email?

I would appreciate an extra couple of views (from various angles) of the H CCD, to give me the opportunity to

show its unusualness.

Oh, ignore the square brackets saying [Newman3], or whatever. That's a reminder to me of the file name of that photo.

Apologies

I seem to be asking an awful lot of you. I'm sorry to be a pain, but it's all done with the intention of producing a first class article that both foreigners and U.S. citizens can enjoy. I've posted you a copy of the 2nd edition of Michael's Rocker booklet, with the improved pictures, as I think you'll find it useful. (I did it in a great rush, and there are some embarrassing mistakes. Oops!)

Best wishes Diana

P.S. Copy to Ruth Willard

Unknown US Coin Balance BY E P NEWMAN

Version 2

Finding a previously unknown American gold counterfeit detector created in 1849 was like learning that an extinct species of animal is very much alive. This newly-located weighing device is distinctive in that it incorporates one swinging arm to accommodate some denominations of US gold coins, while the beam to which that arm is attached holds the others. Only a hint of its possible existence has been available, but that hint had been unnoticed. To understand the unique status of this device we first look at its predecessors.

Predecessors in U.S.

During the American colonial period and well into the first half of the 19th century in the United States, equal-arm balances in a pocket-sized box or case were used to test the weight of foreign coins in circulation. The results were compared to tables specifying the correct weight of the coins. The only other protections against counterfeits were careful observation and a simple vibration test (that is, a coin was either balanced and tapped or spun on a hard surface to check if it had a ringing sound.) Casting, alloying and plating of counterfeits steadily became more sophisticated and thus improved accuracy in testing became necessary. A counterfeit composed of other metals could also be increased in size (either diameter or thickness) to produce a proper weight in an attempt to deceive the tester.

Predecessors in England

Mechanics, rarely in England in the late 18th century and prolifically in the 19th century, had developed pocket-sized brass balances containing two platters [holders] for the two current gold coins cut into the beam at proper distances on one side of the fulcrum and a fixed poise [counterweight] on the other side. The moment(1) created by either denomination of a genuine gold coin being tested would be the same and would balance the poise. Horizontal, circular platters of the exact circumference of a genuine coin were countersunk into the beam to test the diameter. A slot equal in width to the thickness of the genuine coin was cut across the diameter of each coin platter so that thickness could be checked. This was called a slot gauge. A chord, or arc, was commonly cut away from part of the circumference of each coin holder on opposite sides of the beam so that a coin could easily be lifted out of the holder with finger and thumb. The fulcrum on which the beam rested was mounted on a brass base and such a device was called a rocker because of its seesaw movement on the fulcrum.(2) Fig. 1. [Picture of English rocker. I will provide this from Michael's booklet, version 2, fig. 18]

The first detector for U.S. gold coinage

The first American counterfeit coin detector (any mechanical detector is hereafter referred to as a CCD) copied such English principles and was produced in 1834 by T Moore of Philadelphia to test the U.S. \$2.50 and the \$5 of the new size and weight (III-2-4).(3) Fig. 2a & 2b. [Newman1 & 2] This device did not check a U.S. \$10 because no \$10 U.S. gold coin had been struck since 1804 and other U.S. gold coins from earlier years had been withdrawn from normal circulation by banks because their intrinsic value was higher than their face value. Moore's CCD was made with and without the name of the maker punched onto the poise. Sometimes the word PATENT appeared on the base even though no patent was ever issued. It was about 3.9 inches in length and about 0.8 inches in height, so it readily fitted into the pocket or pouch.

Just prior to the major discoveries of gold in California in 1848, only three denominations of U.S. gold coinage had been struck: the \$2.50 (quarter eagle), the \$5 (half eagle), and the \$10 (eagle). When large quantities of California gold became available for U.S. coinage, Congress authorized the Mint to add \$1 and \$20

denominations pursuant to the Act of March 3, 1849. At that time foreign gold coins circulated extensively in the United States, and counterfeiting and tampering had become a major problem. The modest amount of U.S. gold coins then in circulation was not substantially targeted by counterfeiters. But when U.S. gold coinage was to increase greatly and foreign gold coins in American circulation were to be phased out, immediate and improved protection was needed against counterfeit and underweight U.S. gold coins

In 1849 however, the size of any new CCD became a problem because of the need to accommodate the five different denominations of gold coinage (\$20, \$10, \$5, \$2.50, and \$1) which were, or were about to be, in circulation. (4) The \$20 double eagle was 20 times the mass of the \$1 gold piece. In order to use a rocker similar to Moore's or of an English type, the distance of the center point of the \$1 coin platter would have to be 20 times farther from the fulcrum than the center point of the \$20 coin platter to provide the same moment for balancing a full-weight coin. That would require a balance beam of about 15 inches in length (obviously, to reduce beam length the \$20 coin platter would be positioned as close to the fulcrum as practical). Making a pocket-sized CCD similar to previous rockers seemed unworkable. It was realized that placing the coin-holders on both sides of the fulcrum would allow the other end of the rocker to act as the poise. Alternatively the rocker would require an adjustable counterweight or a sliding or separate poise. [Eric, I'm inclined to omit this last sentence, as nowhere in this article do you deal with sliding poises.]

Beginning in the 18th century, the English had successfully employed a single coin platter on one side of the fulcrum for weighing one of several gold denominations and attached on the top of the counterweight side of the fulcrum a small, swinging poise (or poises) on a horizontal hinge, enabling the moment for balancing to be changed manually by turning over one or more swinging poises 180 degrees on the hinge pin or pins. Any such poise was called then a turnover or a turn.5 Fig. 3 [English folder. I will provide a picture.]

The impact of increased U.S. gold coinage
Several American mechanical designers during the period of 1849-1850 attempted to solve the American gold coin-testing problem in different ways. A rocker for only the \$20 coin was produced (III-2-12).6 Fig. 4. [Photo please of Bill Dwyer's \$20 rocker]

K & G Howard of Philadelphia made a rocker limited to testing the \$5, \$2.50, and \$1 denominations (III-2-17 and C 9). Fig. 5. [Photo please of K & G Howard.]

W N Snider, a machinist who worked for the U.S. Mint in Philadelphia, made a countertop gold coin scale for all five denominations using (a) combined thickness and diameter slots running end to end along the center line of one side of the beam; (b) thin flexible metal straps beneath the slots to support the coins in a vertical position; and (c) a movable poise suspended on the beam and locating in the graduated notches on the other side of the fulcrum. Fig. 6. [Snider I will provide a picture]

John Allender of New London, Connecticut, cut three smaller denomination coin platters into the beam on one side of the fulcrum and the two larger denomination coin platters into the beam on the other side of the fulcrum, but had to add a separate poise to fit into the \$1 coin holder when the larger denomination coins were tested (IV-I-10). Fig. 7. [Newman 6] Allender's device was about 8.5 inches long, somewhat larger than the desired pocket size.

The newly-discovered CCD has some coin platters on its one swinging arm and its maker was identified only with a capital H punched in the top of that arm. Fig. 8. [Can we have an oblique view to replace your original fig. 5?] I attribute it to George Howard because the CCD punched with K & G HOWARD PHIL is very similar in shape and workmanship.

The name of G Howard is first listed in Philadelphia directories in 1845 as a machinist at Broad and Paper Streets. In later listings the name became George Howard and then George C Howard. However, there is no K Howard listed in Philadelphia directories, but he may have been an older relative of George Howard. George Howard must have been very ingenious because he broadened the scope of his occupation to mechanical engineer as his business grew and he soon occupied three lots on South 18th Street below Market Street. He advertised in 1862 as a maker of tools for machinists, factories, railroad repair yards, etc. His listings ceased in 1880.

Allender demonstrated his familiarity with the H CCD when he commented in his March 26, 1850 patent application:

I am aware that balances for proving coin have been made with two levers hung upon one fulcrum so

arranged as to weigh all the coins upon one side of said fulcrum, and when the larger coins were weighed the lever in which the small ones are weighed is turned to the opposite side of the fulcrum. Therefore I make no claim to instruments constructed with more than one lever and to weigh upon one side of the fulcrum only.

There are some technical ambiguities in Allender's language as he attempts to distinguish his device from previous rockers:

- (a) *Two separate levers could be hung side by side on one fulcrum with different coin holders and would operate independently of one another.*
- (b) *A swinging arm attached to or laying on top of a basic lever is only a part of a lever and not a lever itself.*
- (c) *When a swinging arm is turned to the opposite side of the fulcrum the arm merely changes the movement on both sides and is still a part of the basic lever and performs no independent leverage.*

What Allender intended to say was that he was not claiming originality for a swinging arm which enabled and required coins to be tested only on one side of the fulcrum but was claiming originality for his way of testing some denominations on one side of the fulcrum and other denominations on the opposite side of the fulcrum. The description (a) obviously referred to the H CCD that had recently appeared. [Eric, do they operate independently on the H CCD? I thought they were interdependent?]

Allender's description of his earlier device was repeated unchanged in the language of the patent issued to him on November 27, 1855 (II-2-9A and IV-1-26).

The H CCD was and is revolutionary and distinctive because the swinging arm, that contained two of the smaller-sized coin platters, transferred the poise, in effect from one side of the fulcrum to the other. (The turns used on earlier English folding guinea balances were small, were placed and normally remained after movement only on one side of the fulcrum, and never contained any coin platters.) When the swinging arm of the H CCD had its smaller-size coin platters facing upward, it covered some of the other coin platters on the beam below so that they were then blocked from use for testing. Fig. 9. [Newman 3. Ruth sent this lovely picture by the wrong method, so I couldn't capture it for the article Could you send it again as an email attachment, size 5 ins across 300dpi?] When that arm was swung over on its hinge across the fulcrum, its mass changed from one side of the fulcrum to the other and exposed the larger coin platters for use in testing. Fig. 10. [Newman 4] The hinge was attached to the beam almost over the top of the fulcrum.

Therefore the mass of the swinging arm of the H CCD had to be arranged with precision because it performed a function on each side of the fulcrum. It was reasonably easy to adjust the moment of a balance beam by reducing the side that was too heavy by filing or buffing off some of its undersides, but, in the case of a swinging arm that was too light, the procedure became complicated. If the maker adjusted the poise side of the beam on which the arm sometimes rested, a further adjustment of the beam on the larger coin holder side might be required. The mass of brass used for casting parts could not be relied upon because the countersinking of coin platters and the cutting of slot gauges and finger cut-outs resulted in substantial weight changes.

Thus, getting the arm equally accurate in both positions required careful handiwork, increasing the cost. To reduce the beam length, the H CCD crowded the \$20 coin platter close to the fulcrum, causing the \$10 coin platter to overlap the \$20 coin platter and the slot gauges to be cut on the diagonal instead of along the center line of the beam, in the same way as Ellinckhuysen did on his Dutch rocker of 1829.(7) [Eric, this comment on Ellinckhuysen might be better as an endnote as it's really there to stop the Dutch readers jumping up and down criticising. Of course there's no assumption that H had ever seen an Ellinckhuysen.]

Frederick Meyers (or Meyer, Myer or Myers) of Philadelphia promptly improved the H CCD by making the beam shorter; eliminating the overlap of the \$10 coin platter over the \$20 coin platter; and realigning the position of the diagonal slot gauges (III-2-13, etc.) This was accomplished by adding a second swinging arm to accommodate the \$5 coin holder. Fig. 11a, b, c & d. [Newman 7, 8, 9 & 10] The second swinging arm was on the same hinge pin that held the first swinging arm containing the \$2.50 and \$1 coin platters. The beam was shortened to accommodate only the \$20 and \$10 coin platters. This enabled the position of the \$20 coin platter to be far enough from the fulcrum to eliminate the overlap with the \$10 coin platter. Because Meyers had transferred the position of the \$5 coin platter from the beam to a second swinging arm, the length of his device was shorter than the H CCD by about one inch. A more complex and desirable CCD was the result, but it required even more labor and adjustment than the H CCD.

Emphasis on low cost

Meanwhile Allender stressed the low cost of his CCD. He could have added a simple turnover without any coin platter on it to take the place of the separate weight he provided, since there was adequate space to do so on the smaller coin side of the beam between the \$2.50 and \$1 coin platters. Presumably he chose not to pursue that option because he was concerned about the production cost. In his patent application filed March 26, 1850, he stated:

This apparatus can be made and sold cheaper than any other that will perform the same service with the same facility.

This cost factor was independently confirmed by a letter from the United States Mint to the U.S. Patent Office dated January 10, 1855 (IV-1-17), in which it is stated with respect to the price paid by the Mint for an Allender CCD: *The cost was trifling.*

The production costs of the H CCD and Meyers' CCD were far in excess of the cost of Allender's CCD. Allender continually sold large quantities of his device. For the two new coins minted in 1853 he added a second depression for the new (larger or smaller??) \$1 coin and for the \$3 coin, a coin platter between and to one side of the \$5 and \$2.50 platters. For those who had purchased his detectors before the \$3 denomination was coined, he sold a brass bushing (of \$2 mass) to fit into the \$5 coin platter to enable \$3 pieces to be tested. He also changed the punched-in lettering on the beam from time to time. His remarkable products are in many collections today.

The H CCD and Meyers' CCD are the only examples known of each device. This indicates that the public chose Allender's CCDs because of their price, even though they were too long to be carried easily in the pocket and in spite of the fact that the separate weight was often mislaid or lost. The rare survival of the H CCD and the Meyers CCD also indicates that very few of them were either made or sold. As is said in the medical profession, *The operation was a major success but the patient died.*

The reasons for and dates of production of many of the foregoing CCDs are confirmed by J R Eckfeldt and W E Dubois, assayers at the U.S. Mint, in their publications from 1849 through 1852 as follows: (8)

As the balance is not a very portable or ready apparatus, several instruments have been contrived expressly for the purpose of combining the tests of weight and dimensions. They are all no doubt worth examining.

Is the H CCD really so rare as it be unique? Has anyone previously known of one? If so, I would be grateful to learn of it. On a "scale" of 1 to 10, the H and Meyers' CCDs seem to be 12s because they are so amazingly clever and distinctive. No coin platters on swinging arms have been reported attached to beams on any CCD elsewhere. The newly-found H CCD can now take a distinguished place in American numismatic, metrological and Gold Rush history.

Captions

Fig. 1. English rocker for the sovereign and 1/2 sovereign, made by the most prolific English maker, Samuel Harrison, working 1825-1833.

Fig. 2a. Moore's Patent Eagle Balance of 1834, for the 1/2 eagle [U.S. \$5] and the 1/4 eagle [\$2.50] coins, showing the top view.

Fig. 2b. Side view of Moore's 1834 detector.

Fig. 3. Folding gold balance by Anthony Wilkinson of Kirkby in England, made before 1785. For the guinea and half-guinea only. A slide indicated the number of grains of gold lost from the coin.

Fig. 4. Anonymous CCD for the \$20 only. Made about xxxx. The poise is stamped with an eagle with outspread wings. Courtesy Bill Doniger.

Fig. 5. K & G Howard [Please provide a photo of this, so that the readers can understand why you identify the H as a Howard. Without visual proof, they just have to take your word for it!]

Fig. 6. Tabletop CCD by W N Snider. The end bracket, that prevents the beam from dropping too far, is a replacement.

Fig. 7. [Newman6] Allender Gold Balance of 1850, with coin platters on each side of the fulcrum. Its separate circular poise was to be placed in the \$1 coin platter only while testing the \$10 and \$20 coins.

Fig. 8. [Newman5 not useable.] The H CCD of 1849, showing a side view of the beam and the swinging arm, partly raised. [I feel that it would be very nice to have an oblique view from slightly above and to one side of this crucial CCD. Could you get some taken? It is essential that the light falls from above and secondarily from the side, not from below.]

Fig. 9. Sent by Ruth as a Word document instead of an attachment. Could you send them to me as JPG attachments please? My computer will only accept one picture on each email. don't ask me why it's all way above my head, but I know it gets a headache if we expect too much of it!

Fig. 10a, b, c & d. [Newman7] Meyer's 1850 CCD showing its two swinging arms with their coin platters partly covering the beam's coin platters. When a \$1 coin was to be weighed, the poise was largely balanced by the mass of the two swinging arms, plus the mass of the beam, so the added weight of one little dollar was enough to tip the rocker.

Fig. 10b. [Newman8] Meyer's 1850 CCD showing the first arm (with platters for \$1 and \$2.50) turned over to the poise side of the fulcrum, exposing for use the second swinging arm with its \$5 platter and \$5 gauge. When a \$5 coin was to be weighed, the poise was heavier than for the \$1 coin, because the mass of the first arm was added to that of the poise, and the mass of the second arm plus that of the beam only tipped the poise when the \$5 coin was added.

Fig. 10c. [Newman9] Meyer's 1850 CCD showing both swinging arms on the poise side of the fulcrum, fully exposing the beam with its platters for the \$20 and \$10 coins.

Fig. 10d. [Newman10] Meyer's 1850 CCD showing the side view of the beam with its two swinging arms partly raised. [I can't differentiate the top of the beams from the shadows. Please could you get a new photo? If this method of taking the photo is essential, please put a tiny object under the pillar, to raise the beam off the surface and expose the top of the beams to view. I use lumps of the faintly sticky stuff that people use to temporarily stick posters to the wall. I would prefer an oblique view from above and to one side, with the sticky stuff hidden from view but holding the swinging arms up.]

Acknowledgements

Sincere appreciation is expressed to my friend Donald Gorlick for bringing the H CCD to my attention and recognizing its significance; to my son Andrew E Newman for making it available for my study; and to James Rhodes, Thomas Serfass and Mark Rabinowitz for digital photography and assistance; and to Barbara Gregory and Ruth Willard for masterful editing.

Notes & References

1. Because the word "moment" has various meanings, the use of the word moment herein means "a tendency to produce motion about an axis" such as a fulcrum, and the mathematical formula for a moment is the product of the mass (or weight) multiplied by the distance of the center of gravity of the mass from the fulcrum.
2. For English antecedents, see Crawforth, M A, *Sovereign Balances, 1, Standard Rockers*, Oxford, England, 1984. 2nd edition, 2001.
3. Newman, E P, & Mallis, A G, U.S. *Coin Scales and Mechanical Counterfeit Coin Detectors*, St. Louis, 1999. The part, section and page numbers are in parentheses in the text.
4. The \$10 denomination had been resumed in 1838 and the \$3 denomination was not authorized until February 21, 1853.
5. Crawforth, M A, *Weighing Coins, English Folding Gold Balances of the 18th and 19th Centuries*, London, 1979.
6. Newman, E P, & Mallis, A G, U.S. *Coin Scales and Mechanical Counterfeit Coin Detectors*, St. Louis, 1999. The part, section and page numbers are in parentheses in the text.
7. Crawforth, M A, *Sovereign Balances, 1, Standard Rockers*, Oxford, England 1984, 2nd edition 2001, pp6-7
8. *Supplement to the Manual of Coins and Bullion Philadelphia*, Dec. 1849, p232; *New Varieties of Gold and Silver Coins*, First edition Philadelphia 1850, p36; Second edition (New York, 1851), p12; and Third edition (New York, 1852), p12.

Subj:	Unknown CCD article
Date:	08/08/2002 1:05:50 PM Central Daylight Time
From:	EricNumis
To:	lehitchins@ ccc bes.org, UK
CC:	RHWillard

Dear Diana: Thank you for your very kind words about my article and the book I wrote with George Mallis. Coming from you that makes it more of a pleasure to continue to write. You said you liked the last paragraph of my article and I now wish to amend it to include you. I feel that editors do not get enough recognition for the input some of them provide because the author I often thinking about his or her own importance or something.

I greatly appreciate the devotion you have shown to improve my article and I realize the care and extensive amount of time you put into it. Your knowledge in the field is all too evident.

As to using H instead of George Howard in referring to the item I have an improvement I think you will relish. If you put quotation marks on the "H" I believe it will avoid possible confusion as it is often followed by CCD and other lettering. I will have an image taken of it shortly.

The problem of using the word platter instead of coin holder is a difficult one for me. A platter is flat or more or less flat and is excellent in describing folding scales and 18th century scales. However when a hole is drilled or countersunk in a beam and the sides of the hole are part of its function I do not think the word platter is as clear. No one can misinterpret the words coin holder. What I suggest is that "coin holder or platter" be used as the initial use and "coin holder" be used thereafter. I believe Michael would agree as no flat platters are involved in the new CCD. In fact on page 11 of your revision of Michael's book you use the word "recess" to distinguish its structure.

You found one of my many errors or Oops in the date of production of the \$20 rocker. It is 1849 and not 1875. In the rush to get the book out before George died I missed correcting some of what he wrote. No image of it is needed as it is pictured in our book.

I am grateful for the second edition of Michael's book and know that he would have appreciated what he knew you would do with respect to it.

As to the images it would be very difficult for me to do them over. I **know** little about the matter and have to bother others and be present. I thought I **was** doing something to clarify the matter by using plan and elevation views of the object in different positions. I took a few images from a diagonal and **they** had shadows and difficulties so that I abandoned them. Can you please use **them** after giving them whatever contrast and background improvements as you can?

I heartily agree with your improvements relating to "commonly", "one's", "only example known", etc.

I wanted to have you hear from me promptly and get your further views before I go over the other suggested changes as I just returned from a trip to Spitsbergen and the North Polar Ice Cap. We flew over England on the way to Kiel from which our ship sailed.

Thank you for the wonderful work you are doing on my article. You are a friend

indeed to a friend in need.

Evelyn joins me in sending you and yours our very best wishes to thrive.

Eric

Subj:	Re: New dixcovery article
Date:	08/25/2002 4:11:57 PM Central Daylight Time
From:	RHWillard
To:	EricNumis
CC:	LeHitchins

Dear Eric,

I have already airmailed all your photos to Diana, so unless you are now airmailing me some new photos, I have nothing more here to send her.

With respect to PP #8, I would like to mention that even though it is in your book, probably fewer than half of the ISASC members have the book. You may want to reconsider sending a photo to go in EQM with your article.

Glad to hear you are recovering from your surgery.

Ruth

Subj:	Re: New dixcovery article
Date:	08/25/2002 8:49:17 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Ruth: Thanks for your prompt reply to my letter to Diana. As to the \$20 rocker photo it is diverting and not new. I have too many images already. She wants to put the Snider and that is fine as that has not been published and is not in our book. It has no relationship to the new discovery except the date.

If you will please examine Diana's letter to me of Aug 8, 2002 she asks for a resend of one of the pictures you sent her. Will you straighten this out? She sent you a copy. I am going to send you the picture of the "H" on the swinging arm as soon as my friends let me have a print. The picture has already been taken and maybe they can also send it by disc. Your blurry- eyed but seeing much better Eric.

Subj:	New dixcovery article
Date:	08/25/2002 4:02:17 PM Central Daylight Time
From:	EricNumis
To:	lehitchins@bes.org.uk
CC:	RHWillard

Dear Diana: We returned from a fascinating trip to Spitsbergen and went as close to the North Pole as the ice cap would let us. Pristine beauty, a few polar bears, sensational glaciers and too much food. Then I had cataract surgery so I can see better. Thus the delay in this supplement to my 8/8/02 answer to your fine editing. I leave it up to you as to whether platter or coin holder should be used, but whichever you decide upon mention the other along with the first use in parenthesis or as an alternate.

I have prepared an image of the "H" and it shows a close-up of the fulcrum housing and the hinge as well. Ruth will send it as I do not know to do this.

Change to PP#6: "or a sliding" as you suggest because the word adjustable probably includes a sliding poise.

Change to PP#8: No image seems necessary as it is pictured in the book and is a standard type rocker.

PP#10: The Snider scale image is fine with me. Glad you have it. I never knew there was a replacement of the support on the poise side.

PP #14: The "H" swinging arm is not really independent as it moves from one side of the fulcrum to the other changing the beam moment.

PP#16: I believe that "a poise" is better than "the poise."

Ruth will send this image as she gets a copy of this letter.

PP# 18: Do whatever is best for a Dutch treat.

PP# 20: It has a bigger diameter.

Captions Fig 4: Made about 1849.

Captions Fig 5: "Soon come" as they say in Jamaica.

Very important: Please add your name to the other editing names in the Acknowledgment.

Thank you again for all of the careful help. My best. Eric

Subj:	Fwd: New dixcovery article
Date:	08/26/2002 12:06:45 AM Central Daylight Time
From:	RHWillard
To:	LeHitchins
CC:	EricNumis

Dear Diana,

I have just received this puzzling letter from Eric and am at a loss to know what picture he is talking about. While I have an email from you on Aug 8, there was no attachment with it. I do have an email from me to you on Aug 8, attaching the troublesome Fig. 3 in .tif. I also sent Fig. 3 to you in .jpg

As you know, I airmailed all Eric's prints to you in the same envelope as the payment for the Patent Models book. I do have my scanned copies of all his pictures in both .tif and .jpg and can easily send you any of those if that will help you.

Aug 8 is about the time I was having trouble with my first 3 Klez virus infections. Maybe you sent me a request that I failed to receive. What is it that you would like?

Ruth

Forwarded Message:

Subj:	Re: New dixcovery article
Date:	08/25/2002 8:49:17 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Ruth: Thanks for your prompt reply to my letter to Diana. As to the \$20 rocker photo it is diverting and not new. I have too many images already. She wants to put the Snider and that is fine as that has not been published and is not in our book. It has no relationship to the new discovery except the date.

If you will please examine Diana's letter to me of Aug 8, 2002 she asks for a resend of one of the pictures you sent her. Will you straighten this out? She sent you a copy. I am going to send you the picture of the "H" on the swinging arm as soon as my friends let me have a print. The picture has already been taken and maybe they can also send it by disc. Your blurry- eyed but seeing much better Eric.

Subj:	Your \$20 CCD by unknown maker
Date:	08/27/2002 2:22:32 PM Central Daylight Time
From:	RHWillard
To:	wdoniger@jong.com
CC:	LeHitchins , EricNumis

Hi, Bill and Mary Ellen,

As I just told Mary Ellen on the phone, once again we are requesting your help.

Eric Newman has written a fine, comprehensive article about a newly discovered CCD and how it fits into the general picture of CCDs. But some of the pictures he has submitted are not clear enough to tell the story.

Would you be able to take a new photo of your \$20 rocker as shown on page III-2-12 of Eric's and George Mallis's book? Please take it at an oblique angle and from above, to show the markings on both the platter and the counterweight.

This is not an urgent rush job, as we plan to use his article in the EQM after the one currently about to go to press. But we are really eager to that the pictures do justice to the article. You can send the print directly to Diana, or to me for transmission to her.

Many thanks, and best wishes to both of you.

Ruth

Subj:	Diana's CCD comments
Date:	09/02/2002 3:54:26 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

I gave you the wrong dates for Diana's comments regarding the CCD patents. That information belongs in the following issue, which begins with the Centennial Celebration in 1876 and goes as far as we can list the patents on two pages.

So I don't need an answer overnight, but I would still like to have it in hand whenever convenient for you.

Best Regards, Ruth

Subj:	Diana's Comments
Date:	09/02/2002 3:29:26 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Diana has sent the following comments which she wants me to include within my text for the US Patents 1871-1875. I agree that we need to explain the large number of CCD's patented during this period, but I need you to verify the accuracy of her statements. I have already researched and written what I believe to be the accurate historical background of this period, but I am not qualified to judge the accuracy of her statements about about coinage and currency in the US.

i'm going to "paste-in" those comments in blue. My questions are in red.

Hitchins

To: RHWillard

Ruth,

I think we can publish one or both of these comments with the CCDs in issue 4.:

In addition to the more technologically refined CCD's (which, incidentally, were adapted in time to become the coin receivers for coin-operated devices that evolved into the vending machines of the present day) cash registers of the era invariably had a piece of marble or glass on the "shelf" above the cash-drawer. This was intended for a convenient place to drop coins to "ring-test" them before putting them in the cash-drawer, a lower tech and less expensive alternative to the CCD's. (Eric, Do you know whether this was true of US cash registries in the 1870s?) I can only speculate there must have been quite a lot of counterfeit coins in circulation at the time. (Eric, is this true?)

Of course, during the Civil War, "official" coins had almost disappeared from circulation due to hoarding, and all sorts of "substitutes" circulated - private issue tradesman's tokens (not unlike the various eras of tradesman's tokens in Britain) and even encased postage stamps served for small change through much of the 1860's. (Is this paragraph this true?)

Even as late as the 1880's there were famous forgeries, one of which was the new "V" nickel five cent piece. It was approximately the size and shape of a five-dollar gold piece (occupying approximately the same place in the monetary system as a half-sovereign), and originally had only a "V" on its reverse. Many enterprising folks gold-plated them and passed them off as gold pieces, occasioning the mint to add "CENTS" below the V in short order. (Is this true?)

And the second comment:

The short answer is that they weren't needed until then. The resumption of specie payments in 1876 brought gold and silver coins back into circulation for the first time since the beginning of the Civil War. (True?) While mintage figures for 1861-1876 are often comparable to those for the period after 1876, it seems that the vast majority of the coins minted before 1877 were melted shortly after issue; those that were not were hoarded and did not circulate. (True?) Due to the resumption of specie payments and several gold bonanzas in the Carson City area large quantities of gold and silver were coined and circulated after 1876. (I was not aware of gold bonanzas in Carson City. Is all of this correct?)

Best wishes Diana

Thursday, September 05, 2002 America Online: EricNumis



American Numismatic
ASSOCIATION

818 North Cascade Avenue
Colorado Springs, CO 80903-3279
Telephone 719/632-2646
Fax 719/634-4085
E-mail anaedi@money.org

September 17, 2002

Eric P. Newman
6450 Cecil Avenue
St. Louis, MO 63105

Dear Eric:

Thank you for your patience regarding our evaluation of your submitted manuscript, "An Unknown 1849 American Gold Coin Counterfeit Detector Appears."


As you may be aware, *The Numismatist* is undergoing a change in format and editorial focus, effective with the January 2003 issue. We are seeking shorter, more succinct articles with an emphasis on mainstream topics. Unfortunately, your excellent study does not fall into this category.

However, I have a proposal for you: If I or a member of my staff writes a brief, introductory article about counterfeit detectors, would you be willing to offer your comments and corrections, and perhaps help us with illustrations? We would include mention of your new find and would guide interested readers to our web site, where they could read your original article in full.

When we initially spoke about publishing your article, I was unaware of the impending changes in the Association's journal. However, I think a more basic approach to the topic might intrigue more readers—plus we can feature four-color photographs!

Please let me know what you think, Eric!

Kindest regards,


Barbara Gregory
Editor/Publisher
THE NUMISMATIST

P.S. Your "Fake Coin Club" spoof will appear in "Mint State Views" in the November 2002 issue.

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

James P. Rhodes
Manuscript Curator
Mercantile Library at University of Missouri St. Louis
8001 Natural Bridge Rd.
St. Louis, MO 63121

September 18, 2002

Dear Jim:

We can not thank you enough for your terrific and sustained help with our Counterfeit coin detector digital photographs. You spent several hours on three separate occasions using a variety of lighting environments to photograph 5 detectors for an article we are writing. We have hopes that the photos will be of use in the new museum.

We truly appreciated your kindness in retaking many of those photographs to meet our needs and those of the editors. It is the least I can do to include you in the acknowledgements for your excellent assistance and we will be glad to give you a copy of the finished article if you would like one. We also appreciate you making CDs of the photos for us to send them to England easily.

You are very talented with the digital camera and the photographs will nicely complement the article we are writing. Thank you again for your thoughtful cooperation.

My best,

A handwritten signature in blue ink, appearing to read "Eric P. Newman". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Eric P. Newman

Cc: John N. Hoover

Subj: Eric P. Newman's counterfeit coin detector article text
 Date: 09/25/2002 12:47:56 PM Central Daylight Time
 From: thomas_serfass@yahoo.com (Thomas Serfass)
 To: bdeisher@coinworld.com (Beth Deisher)
 CC: ericnumis@aol.com (Eric P. Newman)

Hello Ms. Deisher:

Please find attached a copy of Eric's article. It is in Word format. If you prefer it in rich text or some other format, please let me know.

A group of pictures will follow. The captions for the pictures I will include in the emails with the attached image files unless you prefer a different method. The picture's title will include a number corresponding to the caption in the body of the email. I will probably send all this before hearing back from you and if it all needs to be done again in different formats etc. I will be happy to do that. I will be out of the office on Friday (Sept 27) but I will be back on Monday.

I am going to send you the pictures in jpeg format. The originals are in tif format, but they are much too large to send via email. If you want the originals, we can probably put them on a cd for you. Thank you for your help in this matter. Tom Serfass

Do you Yahoo!?

New DSL Internet Access from SBC & Yahoo!
<http://sbc.yahoo.com>

----- Headers -----

Return-Path: <thomas_serfass@yahoo.com>

Received: from rly-xh02.mx.aol.com (rly-xh02.mail.aol.com [172.20.115.231]) by air-xh03.mail.aol.com (v88.20) with ESMTP id MAILINXH34-0925134755; Wed, 25 Sep 2002 13:47:55 -0400

Received: from web10404.mail.yahoo.com (web10404.mail.yahoo.com [216.136.130.96]) by rly-xh02.mx.aol.com (v88.20) with ESMTP id MAILRELAYINXH26-0925134737; Wed, 25 Sep 2002 13:47:37 -0400

Message-ID: <20020925174735.25103.qmail@web10404.mail.yahoo.com>

Received: from [134.124.150.20] by web10404.mail.yahoo.com via HTTP; Wed, 25 Sep 2002 10:47:35 PDT

Date: Wed, 25 Sep 2002 10:47:35 -0700 (PDT)

From: Thomas Serfass <thomas_serfass@yahoo.com>

Subject: Eric P. Newman's counterfeit coin detector article text

To: Beth Deisher <bdeisher@coinworld.com>

Cc: "Eric P. Newman" <ericnumis@aol.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

*10/2/02
 Spoke to Beth
 Deisher
 played in 2 parts
 early pm 2003 use
 pictures excellent
 text long - may edit
 will resubmit revision
 if any to me
 will get back in 2 or 3
 weeks o*

Subj:	Newly Discovered CCD
Date:	10/14/2002 9:38:39 PM Central Daylight Time
From:	EricNumis
To:	RHWillard

Dear Ruth: It has been quite a while since Diana has had the new images and text revisions for the article I wrote for Equilibrium. I want to ask you if it is customary for the author to read an edited revision before it is published. Should I ask her for this or will it come along in due course? Please be nice enough to guide me as I want to try to avoid any ambiguity in image descriptions, text, subheads, etc. My very best to you as always. Eric

Subj:	Re: Newly Discovered CCD
Date:	10/15/2002 10:52:47 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Really professional editors would send it along in due course (and, in my personal experience) require the author to initial every change except for punctuation. With Diana, unless you ask for it, she will not think to send it. If you are hesitant, I will ask on your behalf.

Which brings up a request that I have. On Sept. 2 (shortly after your eye surgery) I sent you a letter asking for verification of some statements Diana wants to insert in the introductory part of my patents article, partially replacing your comments. I asked you to verify the correctness of those statements, but you have never responded to that letter. I have pasted it into this email.

Subj: Diana's Comments
 Date: 9/2/2002
 To: ericnumis

Dear Eric,

Diana has sent the following comments which she wants me to include within my text for the US Patents 1871-1875. I agree that we need to explain the large number of CCD's patented during this period, but I need you to verify the accuracy of her statements. I have already researched and written what I believe to be the accurate historical background of this period, but I am not qualified to judge the accuracy of her statements about about coinage and currency in the US.

I'm going to "paste-in" those comments in blue. My questions are in red.

Hitchins
 To: RHWillard

Ruth,

I think we can publish one or both of these comments with the CCDs in issue 4.:
 In addition to the more technologically refined CCD's (which, incidentally, were adapted in time to become the coin receivers for coin-operated devices that evolved into the vending machines of the present day) cash registers of the era invariably had a piece of marble or glass on the "shelf" above the cash-drawer. This was intended for a convenient place to drop coins to "ring-test" them before putting them in the cash-drawer, a lower tech and less expensive alternative to the CCD's. (Eric, Do you know whether this was true of US cash registriers in the 1870s?) I can only speculate there must have been quite a lot of counterfeit coins in circulation at the time. (Eric, is this true?)

Of course, during the Civil War, "official" coins had almost disappeared from circulation due to hoarding, and all sorts of "substitutes" circulated - private issue tradesman's tokens (not unlike the various eras of tradesman's tokens in Britain) and even encased postage stamps served for small change through much of the 1860's. (Is this paragraph this true?)

Even as late as the 1880's there were famous forgeries, one of which was the new "V" nickel five cent piece. It was approximately the size and shape of a five-dollar gold piece (occupying approximately the same place in the monetary system as a half-sovereign), and originally had only a "V" on its reverse. Many enterprising folks gold-plated them and passed them off as gold pieces, occasioning

Wednesday, October 16, 2002 America Online: EricNumis

the mint to add "CENTS" below the V in short order.

(Is this true?)

And the second comment:

The short answer is that they weren't needed until then. The resumption of specie payments in 1876 brought gold and silver coins back into circulation for the first time since the beginning of the Civil War. (True?) While mintage figures for 1861-1876 are often comparable to those for the period after 1876, it seems that the vast majority of the coins minted before 1877 were melted shortly after issue; those that were not were hoarded and did not circulate. (True?) Due to the resumption of specie payments and several gold bonanzas in the Carson City area large quantities of gold and silver were coined and circulated after 1876. (I was not aware of gold bonanzas in Carson City. Is all of this correct?)

Best wishes Diana

Eric, I am very dubious about some of her statements. Please guide me. Ruth

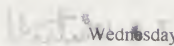
Wednesday, October 16, 2002 America Online: EricNumis

Subj:	Re: (no subject)
Date:	10/16/2002 11:24:48 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Thanks for your prompt reponse. It is always a pleasure to correspond with you.

Ruth



Wednesday, October 16, 2002

America Online: EricNumis

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

Content-Disposition: inline

Subj:	Re: Newly found CCD
Date:	10/16/2002 11:26:17 AM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

You are most welcome. Ruth

Subj:	Re: Newly Found CCD
Date:	10/21/2002 12:05:53 PM Central Daylight Time
From:	RHWillard
To:	EricNumis

Dear Eric,

Of course I will copy you on any correspondence about your article.

To my disappointment, your article and also Bill Doniger's have been scheduled for (assumed) January rather than (assumed) October). Right now we are both pushing hard to get theoretical October out by Thanksgiving.

Many thanks for the informatin you sent me a few days ago.

Best regards, Ruth

Subj:	Re: CCD Discovery
Date:	12/10/2002 5:04:51 PM Central Standard Time
From:	RHWillard
To:	EricNumis

Dear Eric,

I'm very happy that your eye surgery is now complete. Best wishes for a a quick recovery.

Diana is just now finishing the October EQM, and your article will be in the January one.

I can't write more now, but will be in touch ASAP.

Subj: **EQM**
Date: 5/21/2003 11:12:36 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Dear Eric,

We received word today from Diana that she now has nine pages of EQM 2003 No. 1 in Quark, and the rest of the articles are ready to put into Quark. So depending upon her condition, you can probably count on seeing your fine article in print sometime in June.

Best regards, Ruth

Subj: **Re: EQM**
Date: 5/22/2003 11:40:46 AM Central Standard Time
From: [EricNumis](#)
To: [RHWillard](#)

Dear Ruth: Thanks for the pleasant news about the Equilibrium No. 1 for 2003. My query was timed properly. Now how do I obtain 15 copies of that issue for myself? Eric

Sent: Saturday, June 14, 2003 12:59 AM

Subject: Authors' off-prints

Dear Tom, Peter, and Jan,

I have received the following question from Eric Newman, whose significant article on the discovery of a rumored but never-before-found 1849 CCD appears in EQM 2003 No. 1, which is now at the printer.

Dear Ruth: Thanks for the pleasant news about the Equilibrium No. 1 for 2003. My query was timed properly. Now how do I obtain 15 copies of that issue for myself? Eric

Eric has delayed releasing a similar article for publication in the journal of the American Numismatics Society for eight months, waiting for it to appear first in Equilibrium.

Customarily, contributors to academic journals receive ten off-prints free of charge. As far as I know, Allen Yale is the only EQM contributor who has requested copies (since we don't have off-prints) for distribution. Allen asked for and was supplied with eight copies.

It's my feeling that making copies available for distribution in academic circles is an excellent public relations technique. It's also almost necessary if we hope to publish future work from Eric and other writers of his stature.

I think we should certainly give him ten copies, but I don't know what to suggest about the other five he wants. I do think that his recipients will be people whose awareness of ISASC can be valuable to us. (Eric can, however, certainly afford to buy the extra five copies if you decide that is best.)

I'm including Peter in this dialog because of his public relations function.

A second request will be forthcoming. A non-member whose superbly written article tells about the time (1962) that the Fairbanks employees rallied round to raise the funds necessary to keep the St. Johnsbury plant from closing. She gathered recollections and ephemera from residents of that area, and wants six copies to distribute to her informants. Her article will appear in EQM 2003 NO. 2.

Frankly, I can't think of a better use for extra copies of EQM.

At some point I would like to have the board consider whether we should give every contributor who wants them two or three extra copies whenever he or she has an article published. These would probably be given to family and friends, who would proudly show them to their friends and neighbors, some of whom just might be (or become) scale collectors themselves.

Ruth

Subj: **Your request**
Date: 6/15/2003 1:29:19 PM Central Standard Time
From: [RHWillard](mailto:RHWillard@aol.com)
To: [EricNumis](mailto:EricNumis@macnexus.org)
CC: [Dialjanm](mailto:Dialjanm@macnexus.org), tdooley@macnexus.org, peg1@sympatico.ca

Dear Eric,

Working closely with you on the development of your exciting discovery story was a lot of fun for me. And now, after lo these many months of waiting, we are about to see it in print! Roy Patt, our printer, received the master copy last Friday. Depending upon what other work he has in progress, it may take from a week to ten days to process EQM. I'll let you know when we have a shipping date.

After consultation with the appropriate officers I am happy to tell you that ISASC will provide the fifteen copies you have requested at no extra charge.

When your work is published in the Numismatics Journal, will you send me a copy for my files?

Have I told you that after exhaustive investigation I have selected a retirement community that meets my needs and preferences as to space, esthetics, intellectual and cultural stimulation, and proximity to my children and grandchildren?

Escrow has closed, but I will not be moving for awhile. It will take several months to dispose of my scales and weights and prepare my home for either sale or rental, as my children decide. I'll be moving incrementally, probably spending my late afternoons and nights there and commuting to my present home office in the city. It's only a 22 minute drive in average traffic. My various addresses will remain the same for the foreseeable future.

Best regards to you and Evelyn,

Ruth

Forwarded Message:

Subj: **FW: Authors' off-prints**
Date: 6/15/2003 12:23:53 PM Central Standard Time
From: tdooley@macnexus.org
To: RHWillard@aol.com
Sent from the Internet (Details)

Dear Ruth --- I agree with Peter Tom

From: "peter laycock" <peg1@sympatico.ca>
To: <RHWillard@aol.com>
Subject: Re: Authors' off-prints
Date: Sat, Jun 14, 2003, 8:21 PM

Ruth: I agree I think we should happily give the 15 copies. Extra copies are not that expensive and I agree with you that we would get a spin off benefit. I also agree that others who contribute major works should receive a few extra copies. Folks like to share their work and by doing so we could attract additional members who we might not reach otherwise. Regards, Peter

----- Original Message -----

From: RHWillard@aol.com <<mailto:RHWillard@aol.com>>
To: tdooley@macnexus.org <<mailto:tdooley@macnexus.org>> ; peg1@sympatico.ca <<mailto:peg1@sympatico.ca>>
Cc: Dialjanm@aol.com <<mailto:Dialjanm@aol.com>>

Sunday, June 15, 2003 America Online: EricNumis

Subj: **Article on discovery of an unknown Counterfeit Coin Detector**
Date: 6/15/2003 2:34:02 PM Central Standard Time
From: [EricNumis](#)
To: [GTrudgen](#)
CC: [PLMossman](#)

Gary and Phil: I am now in a position to offer for publication an article I wrote on the discovery (bought over eBay) of a previously unknown counterfeit coin detector. The detector was made late in 1849 to check the new \$1 gold and new \$20 gold coins as well as the normal \$2.50, \$5 and \$10. It was mentioned in a patent application in 1850 by another inventor who produced a cheap mechanism which virtually eliminated the prior competing product. The article will be published in EQUILIBRIUM shortly and that is a magazine which is specifically for scale collectors (metrology). It will not reach the numismatic public. The article has clear images of an ingenious mechanism which has never been described. The Numismatist does not want anything scholarly they told me. Is there a place for this in any ANS publication? I realize it does not belong in CNL. Will either or both of you be kind enough to give me any thoughts?

Eric

Subj: **Re: My Equilibrium Article**
Date: 7/11/2003 2:11:42 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Dear Eric,

By all means write directly to Diana. Tell her precisely what your objections are. Although I doubt that *significant* improvements will be made in any of her future editing, having your letter in my files to show the board when necessary will be very helpful to me.

When you are ready to submit your article to the Numismatics journal, tell me what picture files you want and I will email them to you. That will save them the need to make new picture files.

Ruth

A NOT SO AMAZING REVELATION

Jerome R. Katz

With regard to EQM article, "Unknown CCD", by E. Newman which appeared in Issue No. 1, 2003, I offer evidence which corrects the heretofore understanding of the CCD in question. I refer to the section of the article on page 2761, titled The Impact of Increased U.S. Gold Coinage. The statement made is, "A rocker for only the \$20 coin was produced (III – 2 – 12). See Fig. 4."

As the photos accompanying this article will reveal, in addition to checking the \$20 gold coin, the CCD has the capability to check the \$1, \$2 ½, \$5, and \$10 coins as well. Four brass inserts designed to accept each of these additional coins are nested into the \$20 slot. As needed each is inserted into the \$20 slot and then the coin in question is fitted into it for checking. Since there is no insert for the \$3 gold coin, this coin would most likely pre-date 1854. Section III – 2 – 12 of the Newman – Mallis book attributes the CCD (without mention of the four inserts) to the period circa 1875, perhaps incorrectly.

Subj: **Equilibrium**
Date: 7/12/2003 2:03:52 PM Central Standard Time
From: [EricNumis](#)
To: [RHWillard](#)

Dear Ruth: As to the recent issue I am glad your American patent summary was completed as it took a tremendous quantity of work. It will be much appreciated.

As to your suggestion about writing Diana I feel that for the present it would not be right thing to do. She like most people has had her own and her family's unfortunate health problems to deal with and that must be recognized in making a judgment.

I do want to point out another public relations matter which arose in her editing of my article. I knew nothing of it in advance. On page 2761 it states that "No photograph is available" of the K. and G. Howard CCD and then she cites our scale book. The book has a detailed drawing of the CCD which could easily have been used if desired. What purpose is served by saying that no photograph was available when a drawing was? The illustration would have added virtually nothing more than the illustration in figure 4 had already done.

Farther down on the same page as to figure 5 she points out that part of the illustrated object is replaced. This seems to be a pointless and unnecessary comment which only demeans and diverts from the subject under review.

All I am pointing out now and did previously is that both author and editor need to go over the final text or draft to avoid problems and if there are different points of view on matters to try to compromise while recognizing that the editor has the final say. It is great to have an editor to clarify or add something new but the author bears the final responsibility for the content. There will always be differences of opinion but the goal is to inform, educate, stimulate and entertain the present reader and future readers.

Now that I have sounded off I hope you will understand that I am not really grouching but merely observing as the piece is already published.

I appreciate your offer to send images for the revision of the article when submitted for publication for the numismatic public. I will take advantage of that in due course.

My best to you as always. Eric

Subj: **New information about CCD**
Date: 8/17/2003 8:58:39 PM Central Standard Time
From: [RHVillard](#)
To: [EricNumis](#)
File: **A NOT SO AMAZING REVELATION.doc** (20992 bytes) DL Time (46666 bps): < 1 minute

Dear Eric,

I always enjoy talking with you. Sorry I had to answer the doorbell. The caller was a five-year-old neighbor bringing me some favors from his birthday party, which I could not attend. I now have a jump rope, several miniature candy bars, and a small plastic train engine to console me for missing his party.

(We were across the bay having a birthday/going away party for my granddaughter Anne, who will soon celebrate her 18th birthday during her first week of dormitory life at the University of Puget Sound.)

Here is Jerry Katz's email. As you know, he is often abrupt. We'll soften it a bit before printing. We will welcome a sentence or two of appreciation for the new information, if you are so inclined. While you were disappointed that Jerry did not contact you directly, it is quite customary when responding to such a query in publication to write to the magazine.

I'll put the pictures in the next email.

Ruth

Subj: **Re: My Equilibrium article.**
Date: 8/18/2003 1:10:34 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Dear Eric,

Yes, we have a standing policy to encourage reader response, and will appreciate receiving your "for publication" blurb.

Of course I would like you to write Jerry a "thank you" note.

You almost guessed it. I'm in my fourth childhood: my own, my children's, and children of the delightful young couples who are revitalizing this somewhat geriatric neighborhood. The area is so pleasant that people rarely leave their empty nests until forced into it. I'm now about the eldest and I really enjoy watching strollers and training wheels replace the canes and walkers of recent times. I am the frequent recipient of home baked brownies, and if anyone is outside when I arrive home with bags of groceries in my trunk, he or she comes right over to help me carry them into the house.

These young professional people are excellent parents. Many mothers work (most have at least part time nannies) and nearly all the fathers take the toddlers by the hand, the babies in strollers, and the family dogs on leash to a little park at the corner before dinner every evening.

Fortunately for my future happiness, I will be able to look out my south windows at a parklike churchyard with an elementary school beside it, and hear the sounds of childhood.

I hope you will come out to see your grandson's new house. If so, I will show you my present and future homes.

Ruth

Subj: **The Katz comment**
Date: 8/19/2003 8:49:00 PM Central Standard Time
From: [EricNumis](#)
To: [RHWillard](#)

Dear Ruth: I have been thinking over the comments of Jerome R. Katz and concluded that I have to be open with you as to what I think. I like most writers have been criticized before and have made errors in material I have written. I have always welcomed corrections and challenges. There are two kinds of mistakes or omissions a writer can make, namely (a) not being aware of certain data after looking for it and (b) ignoring or misinterpreting previously found data published or furnished by others.

The title to the Katz comment seems to be an attack on the entire article or on the previously unknown CCD itself when he says A NOT SO AMAZING REVELATION. As an editor you will have to determine whether that title should be published.

The Katz description as to how the four inserts are used seems to be inaccurate. His language seems to indicate that the insert for the coin being tested is fitted directly into the \$20 slot. From the pictures furnished the three smaller inserts would slide around in the \$20 slot because their bottom diameter is smaller than the \$20 coin holder. It seems that the insert for the coin being tested and all larger inserts have to be nested in at the same time. It would not be helpful for the editor or anyone else to compound any such possible error. I certainly do not wish to point it out as a rebuttal and create any further turmoil.

The last sentence is a criticism of an error in the book. It so happens that Mallis wrote that portion and I did not have time to check much of his writing because he was in very poor health and I wanted to have the book out before he died. At least Mallis had the satisfaction of seeing the book distributed. The Katz comment criticizing the book is mostly a repetition of his primary correction. The editor should consider modifying that portion of the comment.

In view of the foregoing I do not feel I can thank Katz for his input and ignore the error he seems to have made. There is an alternative. You could rewrite his comments with your editing power and I will be glad to try to be of help to you on that. I can then submit a simple appreciation for his input of new facts.

Never a dull moment. I have never been in such an odd situation before.

Eric

Wednesday, August 20, 2003 America Online: EricNumis

Subj: **Re: The Katz comment**
 Date: 8/20/2003 11:20:23 AM Central Standard Time
 From: [EricNumis](#)
 To: [RHWillard](#)

Dear Ruth: I am glad you understand my 8/19/03 communication and note that you answered it in the middle of the night.

I wish to add the following:

The last sentence of the Katz comment mentions the 1875 date on page III - 2 - 12 of our Scale book as perhaps incorrect. That book was published in 1999. That 1875 date was corrected to 1850 in my article in EQUILIBRIUM in 2003. Therefore I believe that the Katz inclusion of that criticism might be classified as old news. I certainly prefer not to point that out to him and you may wish to avoid mentioning it because it was stale as of the time it was written to you.

My best to the night walker.

Eric

Ruth

Thanks for your frank and informative letter. I understand where you are coming from. Jan and I will handle it carefully.

Dear Eric,

Subj: **Re: The Katz comment**
 Date: 8/20/2003 1:04:43 AM Central Standard Time
 From: [RHWillard](#)
 To: [EricNumis](#)

Wednesday, August 20, 2003 America Online: EricNumis

Subj: **Re: The Katz comment**
Date: 8/20/2003 5:00:00 PM Central Standard Time
From: EricNumis
To: RHWillard

Ruth: You are right that I have not seen the inserts and do not have a specific report of their use. I will nevertheless try to convince you of the soundness of my assertion. I feel that the pictures of the inserts indicate that they have a flat bottom and the diameter of that bottom becomes smaller as the coin for which they are designed to hold for testing is smaller in weight and diameter. If therefore you put the insert for the \$2.50 directly into the \$20 coin holder which is much larger than the outside diameter of the insert then that insert would not necessarily be centered and the test would be a failure because the moment would not be uniform. The nesting centers each insert. I believe that the 3 larger inserts each weighed the same amount as the coin which was to inserted in each of them so that the moment would remain the same as the unfilled inserts are nested on top of one another. The \$1 insert would weigh 150% of the weight of a \$1 coin because the \$1 coin only weighs 40% of the weight of the \$2.50 coin. All of this takes place because the counterweight stays the same and has the same moment for all tests.

I am sorry to be so technical but that is metrology.

If you decide to print any Katz comment I would like to see its text before I write a thanks for his input.

You certainly are tolerant of all situations and I am so pleased to be able to work with that kind of a person.
Eric

Subj: **Re: The Katz comment**
Date: 8/20/2003 5:08:00 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Thanks, Eric, I have postponed using this item until I have time to do it right. I agree with your conclusion

Ruth

August 28, 2003

To The Editor of the Numismatist:

When single spaced this article will be only ^{typewriter} 7 pages long. This does not include images and their captions.

If it must be reduced a little I have selected an elimination of 10 lines.

Eric

Subj: **Re: (no subject)**
Date: 9/2/2003 12:51:04 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Dear Eric,

I am sending EQM No 2 to the printer today, so will respond to your fine letter probably tomorrw.

Ruth

Subj: **Your CCD discovery**
Date: 9/4/2003 4:36:30 PM Central Standard Time
From: [RHWillard](#)
To: [Jeromekatz](#)
CC: lweighU@earthlink.net
BCC: [EricNumis](#)

Hi Jerry,

Your discovery of the extra weights for that CCD is quite exciting. I did send the information to Eric, and you will be hearing from him. His article, re-written, is about to be published in The Numismatist, and if agreeable with you he would like to acknowledge your discovery, giving full credit of course. As I am sure you are aware, you need not give permission unless you are agreeable.

Ruth

Subj: **Your CCD discovery**
Date: 9/4/2003 5:17:07 PM Central Standard Time
From: [RHWillard](#)
To: [Jeromekatz](#)
CC: lweighU@earthlink.net
BCC: [EricNumis](#)

Hi again, Jerry,

I neglected to mention that giving Eric permission to cite your discovery in The Numismatist does not preclude our publishing it in EQM. If, with your permission, we send him the pictures files, EQM will acknowledge.

Ruth

Subj: **Re: Permission to use photo**
Date: 9/5/2003 5:23:02 PM Central Standard Time
From: [Jeromekatz](#)
To: [EricNumis](#)
CC: [RHWillard](#)

Hi Eric -

I have no problem with you using my information for the Numismatist with proper citation.

However, I would appreciate a reprint of the complete article ; I think the publishing trade still uses the term "reprint"?

By the way, there is an inconsistancy with your EQM article and the Newman - Mallis book.

The EQM Fig 4 photo caption uses a date of 1849. The Newman - Mallis book uses a date of 1875. I've attempted to point this out to Ruth Willard when I submitted my photos and commentary to her.

**Best wishes,
JRKatz**

Subj: (no subject)
Date: 9/5/2003 6:06:10 PM Central Standard Time
From: RHWWillard
To: EricNumis

Dear Eric,

I have just seen Jerry's response to your request. I am pleased.

Here's something I would like you to consider doing. You have told me that the Neman/Mallis book, like all such books, contains some errors.

Since scale collectors will be inclined to believe everything in such a book, why don't you prepare an *errata* sheet to be supplied with future sales and mailed with a cover note to each previous buyer? that could only enhance your reputation as a true scholar.

Best regards, Ruth

Sunday, September 07, 2003 America Online: EricNumis

Subj: **Re: Permission to use photo**
Date: 9/7/2003 10:12:08 AM Central Standard Time
From: Jeromekatz
To: [EricNumis](#)

Hi -

Ruth gave me the impression that it was not a matter of "if" but "when" your article would be published in the Numismatist. Is publication doubtful?

Good luck.

JRK

JRK

Good luck.

Ruth gave me the impression that it was not a matter of "if" but "when" your article would be published in the Numismatist. Is publication doubtful?

Hi -

Subj: **Re: Permission to use photo**
Date: 9/7/2003 10:12:08 AM Central Standard Time
From: [Jeromekatz](#)
To: [EricNumis](#)

Sunday, September 07, 2003 America Online: EricNumis

Subj: **Counterfeit Detector article by Eric P. Newman**
Date: 9/9/2003 3:29:10 PM Central Standard Time
From: EricNumis
To: EDITOR@MONEY.ORG

Dear Barb: Here are the descriptive captions for the images for the above. The images will come tomorrow. I have held the images to 11.

Fig. 1. Newly discovered HOWARD 1849 U.S. gold coin detector with a swinging arm hinged to the balance beam. Coin holders on both swinging arm and beam.

Fig. 2. Late 18th century retractable English guinea and half guinea detector with hinged turn and slider to adjust the moment to the coin being tested.

Fig. 3. Early 19th century detector for an English sovereign and half sovereign rocker with countersunk coin holders and slot gauges.

Fig. 4. MOORE 1834 rocker detector for testing U.S. \$5 and \$2.50 gold coins.

Fig. 5. 1850 rocker detector for testing U.S. \$20 gold coins with separate bushings which when nested would test the other U.S. gold denominations.

Fig. 6. SNIDER 1850 sliding poise balance with flexible straps for vertical U.S. gold coin support and gauging.

Fig. 7. ALLENDER 1850 U.S. gold coin detector having balance beam with coin holders on both sides of fulcrum and a separate counterweight to adjust the moment in order to test \$20 and \$10 denominations.

Fig. 8. Close up of newly discovered HOWARD gold coin detector showing the initial H on the swinging arm with the smaller coin holders, overlapping \$20 and \$10 coin holders and two diagonal slot gauges in the beam below.

Fig. 9. Newly discovered HOWARD 1849 detector with hinged arm swung over to counterweight side of balance beam, exposing \$20, \$10 and \$5 coin holders for use.

Fig. 10. MEYERS 1850 U.S. gold coin detector with two swinging arms hinged to balance beam. Coin holders on both swinging arms and on beam.

Fig. 11. MEYERS 1850 U.S. gold coin detector with both hinged arms swung over to counterweight side of balance beam, exposing \$20 and \$10 coin holders for use.

Subj: Re: Eric's CCD
Date: 9/11/2003 10:42:16 AM Central Standard Time
From: Jeromekatz
To: RHWillard
CC: iweighu@earthlink.net, EricNumis

Ruth - Good to know your brother's situation has taken a turn, possibly, for the better. Regarding my EQM commentary about Eric's CCD, you just caused a TILT!. Altho you believe the article needs rewrite, I do NOT. I will NOT do so to satisfy a kindergarten reader. If you think it needs to be polished then I leave that to the Editorial staff; they've done that to/for me in the past. Between the photos and my text which mentions that the inserts, disks or bushings are nested most EQM readers will soon grasp how the bloody thing was meant to work - certainly, there is NO "rattling" around of the inserts. I will work with you and/or Jan to help, but rewrite is a no -no; I'll scrap the article first! Eric's article in The Numismatist will have it correct. If the ISASC community at large misses out so I'll reveal the information to CCD collectors on an ad - hoc basis as time goes by.

Note: This PM I'm on my way to do an antique show and will be out of touch until Monday AM.

**Cheers,
 JRK**

Subj: **Re: Coin Detector Article for NUMISMATIST**
Date: 9/11/2003 8:10:41 PM Central Standard Time
From: EricNumis
To: editor@money.org

Dear Barb: Your questions are easy to answer.

1. My most recent biography (not autobiography) was published in American Numismatic Society Magazine, Summer 2003, Vol. 2, No. 2. Do not embarrass me further by using much of it. It has a mug of me. If you need me in color I will send that mug in color as long as you return it.
2. You have the finest collection of U.S. Gold (the Bass Collection) at headquarters and they should have pictures of an 1849 gold dollar or an 1850 \$20 which are the best ones to use. Larry Lee will gladly find you a picture or you can take a picture of either or both as they are probably on display.. You probably have both in your general collection as well. The use of an 1834 period piece is not sufficiently connected to the new detector.
3. The name of the metrology magazine is EQUILIBRIUM, not Equalibrium. It is published quarterly by the International Society of Antique Scale Collectors known as ISASC. I qualify as an "antique" scale collector but only collect coin scales. You must be eating the sugar substitute "Equal" to spell the magazine name that way.
4. As usual I will need about 20 printed copies of the magazine as I have to send one to each helper except you.

Thank you for being so helpful in bringing this article to numismatists. Eric

Subj: **Re: Coin Detector Article for NUMISMATIST**
 Date: 9/12/2003 9:45:12 AM Central Standard Time
 From: editor@money.org
 To: EricNumis@aol.com
 Sent from the Internet ([Details](#))

Dear Eric:

Thanks for the info! I considered the Bass photographs, but all are photographed at actual size, and I am in need of an enlarged image. Perhaps I can create a collage of smaller pics to the same effect.

I assure you that "Equalbrium" was a sloppy, e-mail typo; it's not misspelled in the story—I hope!

You and Tom should be receiving a copy of the article late this morning or early in the afternoon. Unfortunately, you won't have a lot of time for review. We'll need your corrections by Monday.

Kindest regards,

Barbara

EricNumis@aol.com wrote:

- > Dear Barb: Your questions are easy to answer.
- > 1. My most recent biography (not autobiography) was published in
- > American Numismatic Society Magazine, Summer 2003, Vol. 2, No. 2. Do
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- > you need me in color I will send that mug in color as long as you
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- > are probably on display.. You probably have both in your general
- > collection as well. The use of an 1834 period piece is not
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- > 3. The name of the metrology magazine is EQUILIBRIUM, not Equalbrium.
- > It is published quarterly by the International Society of Antique
- > Scale Collectors known as ISASC. I qualify as an "antique" scale
- > collector but only collect coin scales. You must be eating the sugar
- > substitute "Equal" to spell the magazine name that way.
- > 4. As usual I will need about 20 printed copies of the magazine as I
- > have to send one to each helper except you.
- > Thank you for being so helpful in bringing this article to
- > numismatists. Eric

begin:vcard
 n:Gregory;Barbara
 tel;fax:719/634-4085
 tel;work:719/632-2646, 800/367-9723, ext. 131
 x-mozilla-html:FALSE
 adr:;;;;;
 version:2.1
 email;internet:editor@money.org
 x-mozilla-cpt;1
 fn:Barbara Gregory



10/17/03

Mr. Newman -

I Congratulate you
on this artistic (?) article.

Tho I don't PRETEND
to COMPREHEND
my admiration I send

and glad to be —

Your loyal friend

Betty

Read This

Subj: **Iraqi Notes**
 Date: 10/27/2003 12:35:08 PM Central Standard Time
 From: clark@money.org
 To: ericnumis@aol.com

Eric:

The mailroom is sending out 25 copies of the October issue to you today.

About the images: Barbara suggests that maybe your friend Thomas could assist with sending the images (as long as it doesn't cost you in fees or time).

Possibly the AOL server won't accommodate such big files. You could separate the notes into individual files and send each separately. In that case, to save time and effort, you could select two or three notes and send only the front of each.

Let us know if this works for you.
 We don't want to be pests and cause you problems.

Best Regards,
 Cathy

Eric -

I sent 2 photos

These 4 are being sent now

It will take 43 min.

You should get in with copying

5 file was sent.

Alison

Subj: **Re: (no subject)**
Date: 11/2/2003 2:38:27 PM Central Standard Time
From: RHWillard
To: EricNumis

Dear Eric,

I am thrilled to hear that your wonderful work is finally getting the treatment it deserves! I can hardly wait to see my copy. Thank you so much for thinking of me.

Please send it to Ruth E. Willard, 40 San Andreas Way, San Francisco CA 94127.

My ISASC duties have been very time consuming this year. Right now I am finishing EQM 2003 No. 3. I think you will find a pleasing innovation in it.

As you may recall, I assumed this responsibility reluctantly, only until Jan could become ready to take over. No 3 will be my second and final issue as Editor. I really cannot afford to devote my discretionary my time to EQM any longer. This responsibility has kept me from downsizing my possessions, preparing my home for sale, and moving to the lovely retirement community where I have been paying \$4,000 a month fees since last May (Not to mention the income lost from the \$\$ tied up in purchasing my new place while not being able to sell my present home.)

And not to mention the growing restiveness of my children and grandchildren, who feel I ought to have more flexibility in my life to enjoy spur of the moment activities with them.

But you and I will stay in touch. I count you among my cherished friends.

Best regards, Ruth

Subj: **counterfeit detector**
Date: 11/11/2003 1:42:09 PM Central Standard Time
From: Wartenberg@amnumsoc.org
To: ericnumis@aol.com

Dear Eric,

I wanted to tell you how much I enjoyed your article in the most recent numismatist about the counterfeit detector. I was not familiar with this kind of instrument and its operations, but your article made it very clear - although I had to read several times to fully understand the mechanics. I was reading this when I was preparing to appear on a radio show on public radio here in New York which was dedicated to currency forgeries and the new \$20 bill.

Very many thanks for your kind letter, which I will send to all trustees (as the Councilors are now called). We are making very good progress with the renovation of the building. On December 2, the Library dedication for Harry Bass will happen, and if all goes well, the move will happen at the end of January.

One thing that I wanted you to consider is whether you wish to have the summer seminar named after you or anyone else. As you created this amazing endowment -which is doing very well-, this would be very appropriate. Presently only the fund from which the money is paid carries your initials. Perhaps you could let me know what you think.

Bob Hoge is coming out to St Louis in December, as he is acting as courier for the Seasons' medals for the Lewis and Clark exhibition. Perhaps you will have time to see him.

I hope all is well with you. Let us know if you come to New York next time. I am sure Jonathan would love to show you his library.

Best wishes,

Ute

Subj: **Scale article**
Date: 11/14/2003 3:27:11 PM Central Standard Time
From: lschapiro@dalton.org
To: ericnumis@aol.com

Opa, Don and I both read your article with great interest. Actually I learned a lot. Things say patented and really aren't. Catching people doing illegal things regarding money has been around a long time. These scales are fascinating and you found your latest one on the Internet. This is pretty clever. I liked the engineering stuff about the levers and how the mechanisms work. The photos were good, and the writing was your usual tongue and cheek laid back humorous style. Cool, Dad. You are something!! Also I liked this mag. better than the ANS one. Love, Lulu

Linda N. Schapiro
Director of Development
The Dalton School
108 East 89th Street
New York, NY 10128
Tel: (212) 423-5255
Fax: (212) 423-5259
Email: lschapiro@dalton.org

Subj: **Your fine article**
Date: 12/6/2003 9:31:53 PM Central Standard Time
From: [RHWillard](#)
To: [EricNumis](#)

Dear Eric,

What a pleasure it was to see your exceptional article published in the Numismatist! You have polished it to perfection. You have included more definitive information, concisely expressed, in the article than any other I have seen on the subject.

I am truly honored to have played a small part in your work and to be your devoted friend.

Now that my final issue of EQM is at the printer, I am beginning to make tangible progress toward furnishing my condo at the Peninsula Regent. Yesterday I bought a handsome glass dining table and chairs, Chinese in design . . . something I have wanted for a long time. I also bought a "chair-and-a-half" for my office, which was attractively equipped with walnut shelves, cupboards, a desk, and a 5 ft-square TV! by the former owners. In case you are wondering about that fractional chair, it is an upholstered piece slightly smaller than a love seat but big enough for two people who know and like each other to share. Doesn't that sound cozy? Now I just need to find someone to share it with.

Not only that, I found a bedspread that is just right for my bedroom, which needs to accommodate the small scale, delicately colored accessories I have from my Mother and my Grandmother. The other rooms will be in more vibrant colors with larger scale furniture and fabrics to accommodate my eclectic taste in collectibles, art, etc.

I have been stopping there for dinner an evening or two a month, whenever I have been visiting the Stanford campus or working with Norm Cima, who lives about ten minutes' drive south of the Regent. I really enjoy the residents that I have met. I'm very happy with my choice, and ready to stop worrying about maintenance, ants in the kitchen when it rains, etc. I plan to start sleeping there right after the first of the year and driving into the city most days to finish preparing my house for sale.

Have you made any plans to visit your nephew in his new home here in SF? Be sure to let me know if you come here. I would definitely like to take you sightseeing if that appeals, or simply entertain you in my new home.

With very best wishes for the holidays.

Ruth

Subj: (no subject)
Date: 12/10/2003 12:21:23 PM Central Standard Time
From: EricNumis
To: RHWillard

Dear Ruth: I fully realize how complex it must be for you to transfer your yourself, your papers, your tangibles, your activities and your thinking from one location to a new pad. Your are probably finding things you did not know you had and reviving memories of all the things you and your husband have accomplished. Make it fun even though it wears you out.

My grandchild and his wife, Daniel M. Newman and Amber Reed, have now moved into the second story condo at 35 Dearborn St. which they just bought. They were in the US Peace Corps together in Paraguay and just went back to visit their area families. If they can be of help to you please let me or them know. Do you have a new telephone number for me and what is your new address?

Now I want you to know I am not sticking my nose into your affairs but if you do not sell your home readily I have a very reliable friend in the real estate business (commercial I think). You may even know him. We have done business with him and his father for over 40 years and still do. His name is David Blatteis, Blatteis Realty Co., Inc., 44 Montgomery Street, SF. I am sure he knows people who might be interested in your home. I have not mentioned your name to him but spoke to him a week or so ago about a piece of real estate on Mission Street which members of our family own (but not my wife and I).

Thank you for the kind words about my CCD article in the Numismatist.

Please let me know if there is anything I can do for you as I am sort of confined to my home because they will not let me drive.

My wife has started a new charitable project for the Missouri Botanical Garden here in St. Louis. All of its friends and members are asked to contribute furniture, paintings, jewelry, antiques, collectibles, etc. to receive a tax deduction and she is opening a store to sell them (Little Shop Around the Corner) which the Garden owns but has no tenant. For decades she has had two similar highly successful operations, one for used clothing and one for used books.

A very pleasant holiday to you. Eric

Subj: **Re: (no subject)**
Date: 12/10/2003 2:14:57 PM Central Standard Time
From: RHWillard
To: EricNumis

My Dear Friend Eric,

Many thanks for your kind letter. I'm flying low today, so will just tell you that my current address and telephone connections will remain in force for several months yet.

Having finally finished my EQM editorial responsibilities I am now finding the stamina and time to take tangible steps toward a move. I am having some new furniture delivered on Dec. 13, and taking small, liftable items down each time I go. I plan to start sleeping there early in January and driving into the city most days as I dispose of the many furnishings and other belongings that I cannot or do not wish to take into my new home.

Thanks for mentioning your realtor friend. I am actually besieged by realtors among my acquaintance, and my response to everyone has remained—"we have not decided whether to sell the house or keep it as a rental (many homes in this area are rented through corporations to executives who are brought here from Europe for a couple of years' training). I personally would like to sell it and be done with the responsibilities but my grandson is quite interested in buying it some time in the future. We shall see.

Yes, the memories this period evokes are poignant, but so are the visions of what my future life as an individual may become. It is as if I have been given a new life—a second chance, as it were—to develop interests and aptitudes that were subordinated in my very busy and productive 58 years as half of a partnership. I'm very happy with my choice of a future home; its ambience, programs, and especially the many fascinating residents whom I am meeting as I stop in for lunch or dinner when I am in the area.

(Speaking of the Peace Corps, a young friend my daughter's age who was in the Peace Corps in the 60's (70's?) where she met her husband—the son of my neighbors—goes on safari in Tanzania every March. She has invited me to go along, and I have accepted for spring 2005. Isn't that exciting? I am also invited to the Holiday parties of several of my daughters' high school friends who used to hang out at our house a lot. I consider that a real compliment.)

Best wishes to both of you. We'll keep in touch.

Ruth

final

- 1) Moore's 1834 Detector for US \$2.50 and \$5 Showing a Top View of its Balance Beam Elements.
- 2) Moore's 1834 Detector Showing a Side View of its Balance Beam Elements.
- 3) George Howard 1849 Detector Showing its \$1 and \$2.50 Coin Holders on its One Swinging Arm which Partly Covers the Balance Beam and its Other Coin Holders.
- 4) George Howard 1849 Detector Showing its One Swinging Arm Turned onto the Counterweight Side of the Fulcrum. The Overlapping \$10 and \$20 Coin Holders on the Balance Beam Cause Diagonal Slot Gauges to be Used.
- 5) George Howard 1849 Detector Showing a Side View of its Balance Beam and its One Partly Raised Swinging Arm.
- 6) Allender 1850 Detector with its Balance Beam Coin Holders on Each side of the Fulcrum. Its Separate Circular Weight is to be Placed in the \$1 Coin Holder for Testing the \$10 and \$20 Coins.
- 7) Meyers 1850 Detector Showing its Two Swinging Arms with their Coin Holders Partly Covering the Balance Beam Coin Holders.

final

- 8) Meyers 1850 Detector Showing \$1 and \$2.50 Coin Holders on its top Swinging Arm Turned onto the Counterweight Side of the Fulcrum, Exposing the Other Swinging Arm with the \$5 Coin Holder and Further Exposing the \$10 and \$20 Coin Holders on the Balance Beam.

- 9) Meyers 1850 Detector Showing Both Swinging Arms turned onto the Counterweight Side of Fulcrum, Fully Exposing the \$10 and \$20 Coin Holders on the Balance Beam.

- 10) Meyers 1850 Detector Showing a Side View of the Balance Beam with its Two Swinging Arms in Partly Raised Positions.

for US \$2.50 and \$5

- 1) Moore's 1834 Detector Showing a Top View of its Balance Beam Elements.
- 2) Moore's 1834 Detector Showing a Side View of its Balance Beam Elements.
- 3) George Howard 1849 Detector Showing its \$1 and \$2.50 Coin Holders on its One Swinging Arm which Partly Covers the Balance Beam and its Holders. other Coin
- 4) George Howard 1849 Detector Showing its One Swinging Arm Turned onto the Counterweight Side of the Fulcrum. The Overlapping \$10 and \$20 Coin Holders on the Balance Beam Cause Diagonal Slot Gauges to be Used.
- 5) George Howard 1849 Detector Showing a Side View of its Balance Beam and its One Partly Raised Swinging Arm.
- 6) Allender 1850 Detector with its Balance Beam Coin Holders on Each side of the Fulcrum. Its Separate Circular Weight is to be Placed in the \$1 Coin Holder for Testing the \$10 and \$20 Coins.
- 7) Meyers 1850 Detector Showing its Two Swinging Arms with their Coin Holders Partly Covering the Balance Beam Coin Holders.

Marsha
Please make
these changes
for me
Thanks

6/17/02
Not final

- 1) Moore's 1834 Detector Showing a Top View of its Balance Beam Elements.
- 2) Moore's 1834 Detector Showing a Side View of its Balance Beam Elements.
- 3) George Howard 1849 Detector Showing its \$1 and \$2.50 Coin Holders on its One Swinging Arm which Partly Covers the Balance Beam and its Holders.
- 4) George Howard 1849 Detector Showing its One Swinging Arm Turned onto the Counterweight Side of the Fulcrum. The Overlapping \$10 and \$20 Coin Holders on the Balance Beam Cause Diagonal Slot Gauges to be Used.
- 5) George Howard 1849 Detector Showing a Side View of its Balance Beam and its One Partly Raised Swinging Arm.
- 6) Allender 1850 Detector with its Balance Beam Coin Holders on Each side of the Fulcrum. Its Separate Circular Weight is to be Placed in the \$1 Coin Holder for Testing the \$10 and \$20 Coins.
- 7) Meyers 1850 Detector Showing its Two Swinging Arms with their Coin Holders Partly Covering the Balance Beam Coin Holders.

- 1) Moore's 1834 Detector for US \$2.50 and \$5 Showing a Top View of its Balance Beam Elements.
- 2) Moore's 1834 Detector Showing a Side View of its Balance Beam Elements.
- 3) George Howard 1849 Detector Showing its \$1 and \$2.50 Coin Holders on its One Swinging Arm which Partly Covers the Balance Beam and its Other Coin Holders.
- 4) George Howard 1849 Detector Showing its One Swinging Arm Turned onto the Counterweight Side of the Fulcrum. The Overlapping \$10 and \$20 Coin Holders on the Balance Beam Cause Diagonal Slot Guages to be Used.
- 5) George Howard 1849 Detector Showing a Side View of its Balance Beam and its One Partly Raised Swinging Arm.
- 6) Allender 1850 Detector with its Balance Beam Coin Holders on Each side of the Fulcrum. Its Separate Circular Weight is to be Placed in the \$1 Coin Holder for Testing the \$10 and \$20 Coins.
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- 1) Moore's 1834 Detector Showing a Top View of its Balance Beam Elements.
- 2) Moore's 1834 Detector Showing a Side View of its Balance Beam Elements.
- 3) George Howard 1849 Detector Showing its \$1 and \$2.50 Coin Holders on its One Swinging Arm which Partly Covers the Balance Beam and its Holders.
- 4) George Howard 1849 Detector Showing its One Swinging Arm Turned onto the Counterweight Side of the Fulcrum. The Overlapping \$10 and \$20 Coin Holders on the Balance Beam Cause Diagonal Slot Gauges to be Used.
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- 6) Allender 1850 Detector with its Balance Beam Coin Holders on Each side of the Fulcrum. Its Separate Circular Weight is to be Placed in the \$1 Coin Holder for Testing the \$10 and \$20 Coins.
- 7) Meyers 1850 Detector Showing its Two Swinging Arms with their Coin Holders Partly Covering the Balance Beam Coin Holders.

- 8) Meyers 1850 Detector Showing \$1 and \$2.50 Coin Holders on its top Swinging Arm Turned onto the Counterweight Side of the Fulcrum, Exposing the Other Swinging Arm with the \$5 Coin Holder and Further Exposing the \$10 and \$20 Coin Holders on the Balance Beam.
- 9) Meyers 1850 Detector Showing Both Swinging Arms turned onto the Counterweight Side of Fulcrum, Fully Exposing the \$10 and \$20 Coin Holders on the Balance Beam.
- 10) Meyers 1850 Detector Showing a Side View of the Balance Beam with its Two Swinging Arms in Partly Raised Positions.

Top

- 8) Meyers 1850 Detector Showing \$1 and \$2.50 Coin Holders on ~~one~~ of its Swinging Arm Turned onto the Counterweight Side of the Fulcrum, Exposing the Other Swinging Arm with the \$5 Coin Holder *and* Further Exposing the \$10 and \$20 Coin Holders on the Balance Beam.
- 9) Meyers 1850 Detector Showing Both Swinging Arms turned onto the Counterweight Side of Fulcrum, Fully Exposing the \$10 and \$20 Coin Holders on the Balance Beam.
- 10) Meyers 1850 Detector Showing a Side View of the Balance Beam with its Two Swinging Arms in Partly Raised Positions.

- ①. Moore's 1834 Detector for US \$2.50
and \$5.



Moore Oblique.
~~Side~~ view

- ② George Howard 1849 Detector
Showing its Swinging Arm Partly
Covering the Coin Holders on the
Balance Beam.



Howard Slant view
~~no~~ arm not turned

- ③. George Howard 1849 Detector
Showing its Swinging Arm Turned
onto the Counterweight Side of the
Fulcrum.



Howard
Arm turned

(4)

Allender 1850 Detector with
its Balance Beam Coin Holders
on Both Sides of the Fulcrum.
A Separate Circular Weight is
Placed ~~in~~ the #1 Coin Holder for
Testing ~~the~~ #10 and #20 Coins ~~on~~
the Other Side of the Fulcrum.



Allender slanted
view.

5.

Meyers 1850 Detector showing its
Two swinging Arms Partly Covering
the Coin Holder on the Balance Beam.



Meyers both arms over beam
holders

(6) ~~Fig~~ Meyers 1850 Detector Showing
its Top Swinging Arm Upside Down
on the Counterweight side of the
Fulcrum and its Other Swinging
Arm over the Balance Beam.



Meyers one arm turned

(7) Meyers 1850 Detector showing
Both swinging Arms Turned
Upside Down onto the Counterweight
Side of the Fulcrum.



Meyers both arms turned



Meyus both arms turned



Meyers one arm turned



Howard arm not
turned.



Meyers side new
both arms on beam
with holders



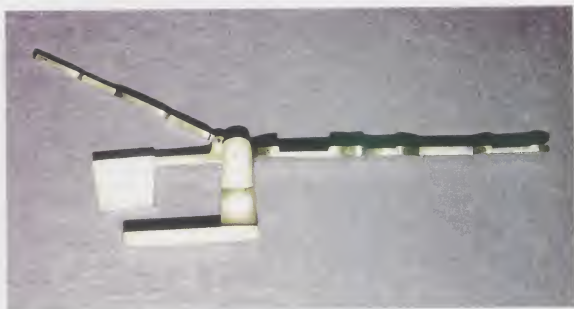
Meyer top view with
both arms on
beam with holders



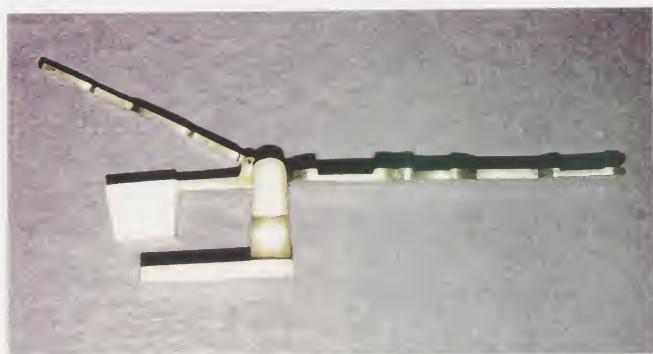
Meyers name



Meyers name

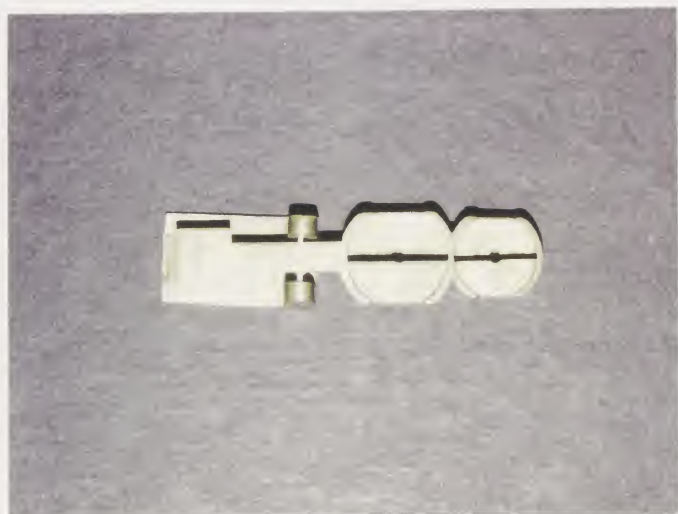


HOWARD COLOR





MOORE



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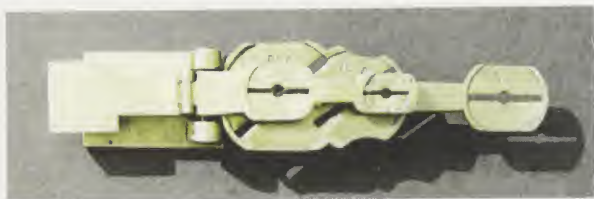






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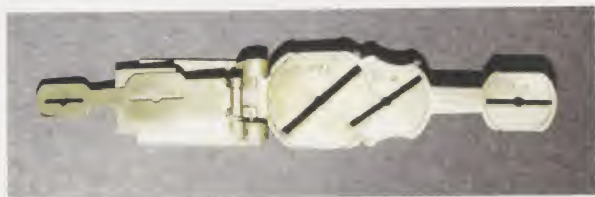
HOWARD-4-10



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HOWARD



ALLENDER







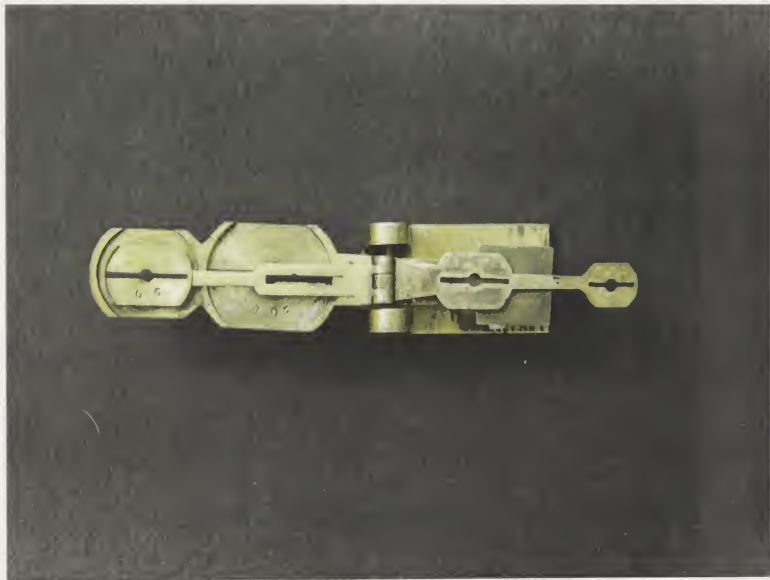
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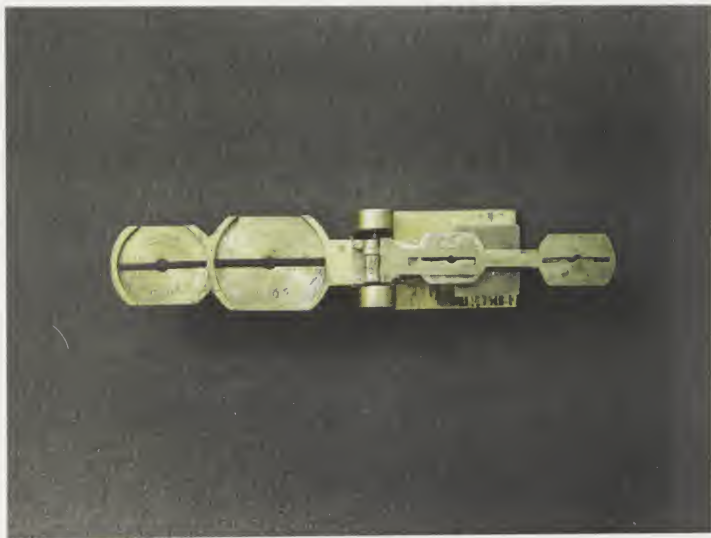


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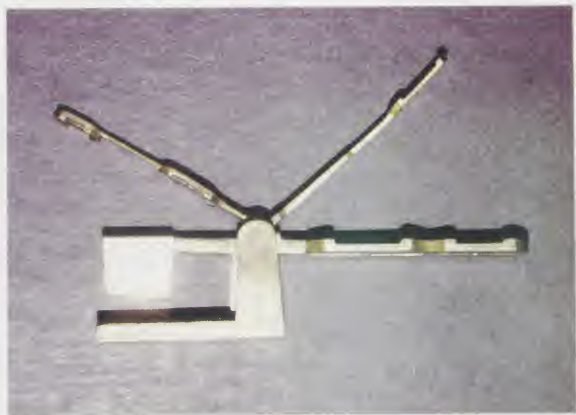
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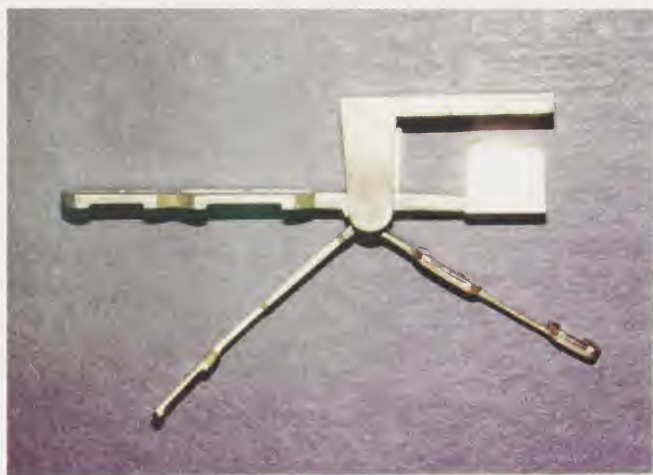
MEYER 02-4-10



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MEMS GLOW



Howard CCD rocker showing \$20, \$10, and \$5 coin holders and the overlap of the \$10 coin holder, the two diagonal slot gauges and the swinging arm turned into the counterweight side of fulcrum.

Howard Counterfeit Coin Detector rocker of 1849 showing the swinging arm with \$2½ and \$1 gold coin holders covering much of the two of three coin holders on the balance beam.

Side view of Howard CCD rocker showing the balance beam with its attached counterweight, the swinging arm and the base.

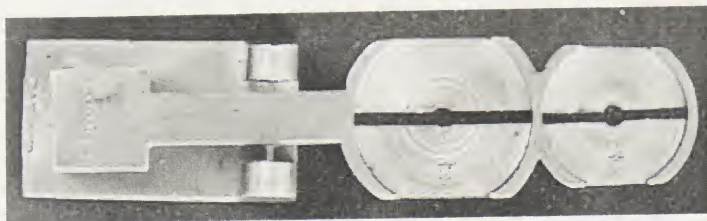
Allender Counterfeit Coin Detector rocker of 1850 showing coin holders on each side of fulcrum and the separate weight to be used for testing the two larger gold coins.

Meyer Counterfeit Coin Detector rocker of 1850 showing the swinging arm with \$2½ and \$1 gold coin holders over the top of both the other swinging arm and the balance beam coin holders.

Meyer CCD rocker showing the swinging arm with the \$5 coin holder on top of balance beam and with the other swinging arm turned to the counterweight side of the fulcrum.

Meyer CCD rocker showing the \$20 and \$10 coin holders and with both swinging arms turned over to the counterweight side of the fulcrum.

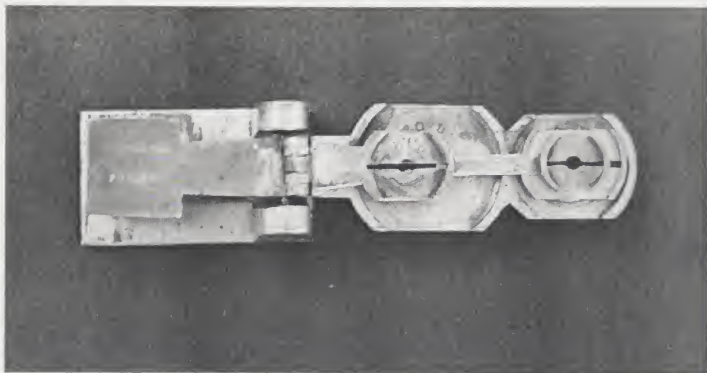
Side view of Meyer CCD rocker showing the balance beam with its two attached swinging arms, its counterweight and base.



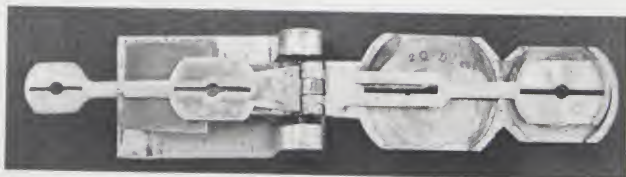
T. MOORE CCD Top view showing $\frac{1}{2}$ and $\frac{1}{4}$ holders



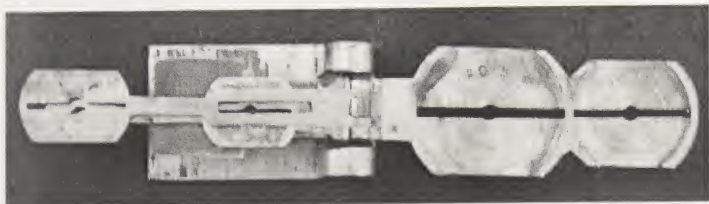
T. MOORE CCD side view of rocker



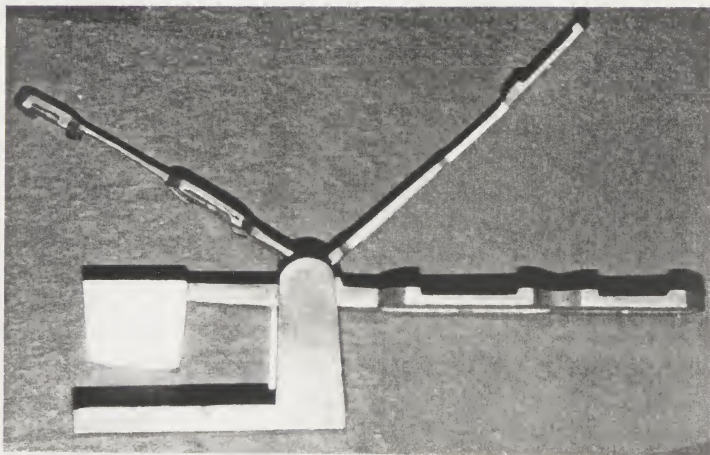
Meyer Counterfeit Coin Detector rocker of 1850 showing the swinging arm with \$2½ and \$1 gold coin holders over the top of both the other swinging arm and the balance beam coin holders.



Meyer CCD rocker showing the swinging arm with the \$5 coin holder on top of balance beam and with the other swinging arm turned to the counterweight side of the fulcrum.



Meyer CCD rocker showing the \$20 and \$10 coin holders and with both swinging arms turned over to the counterweight side of the fulcrum.



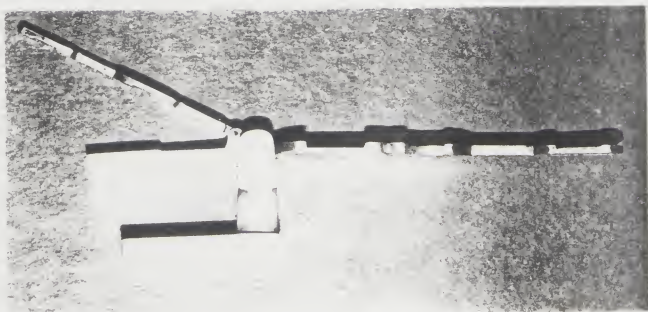
Side view of Meyer CCD rocker showing the balance beam with its two attached swinging arms, its counterweight and base.



Howard CCD rocker showing \$20, \$10, and \$5 coin holders and the overlap of the \$10 coin holder, the two diagonal slot gauges and the swinging arm turned into the counterweight side of fulcrum.



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Side view of Howard CCD rocker showing the balance beam with its attached counterweight, the swinging arm and the base.



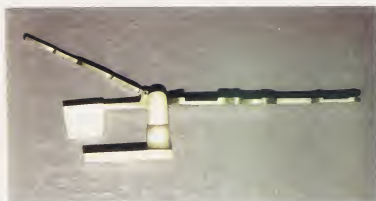
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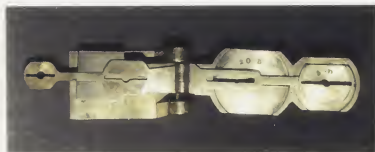
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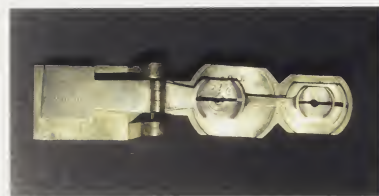
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howard03color.tif



Meyers01color.tif



Meyers02color.tif



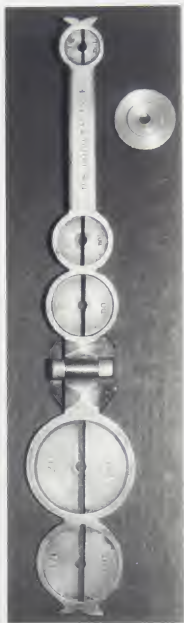
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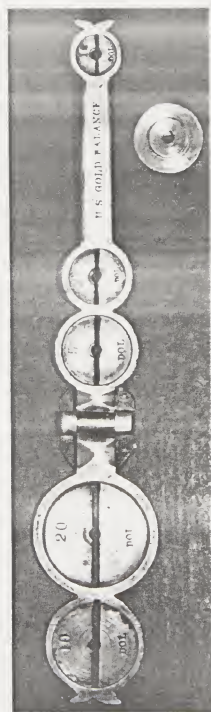
Moore01color.tif



Moore02color.tif



Allender Counterfeit Coin Detector rocker of 1850 showing coin holders on each side of fulcrum and the separate weight to be used for testing the two larger gold coins.



Allender Counterfeit Coin Detector rocker of 1850 showing coin holders on each side of fulcrum and the separate weight to be used for testing the two larger gold coins.